



UNION CARBIDE CORPORATION

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September 22, 1992

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Room L-100  
Office of Toxic Substances  
U.S. Environmental Protection Agency  
401 M Street, SW  
Washington, DC 20460

Attn: Section 8(e) Coordinator (CAP Agreement)

Re: CAP Agreement Identification No. 8ECAP-0110

Dear Sir or Madam:

Union Carbide Corporation ("Union Carbide") herewith submits the following report pursuant to the terms of the TSCA §8(e) Compliance Audit Program and Union Carbide's CAP Agreement dated August 14, 1991 (8ECAP-0110). This report describes a reproductive toxicology study with diethylene glycol butyl ether (CASRn 112-34-5).

"Fertility and General Reproductive Performance of Diethylene Glycol Butyl Ether in Rats", IRDC, DRD No. BSBTS-796S2 (191-900), January 10, 1984 (Test Article: B0547-01).

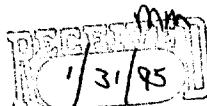
A complete summary of this report is attached.

Previous TSCA Section 8(e) or "FYI" Submission(s) related to this substance are:

(None)

Previous PMN submissions related to this substance are: (None)

B0547-01



(2)

This information is submitted in light of EPA's current guidance. Union Carbide does not necessarily agree that this information reasonably supports the conclusion that the subject chemical presents a substantial risk of injury to health or the environment.

In the attached report the term "CONFIDENTIAL" may appear. This precautionary statement was for internal use at the time of issuance of the report. Confidentiality is hereby waived for purposes of the needs of the Agency in assessing health and safety information. The Agency is advised, however, that the publication rights to the contained information are the property of Union Carbide.

Yours truly,



William C. Kuryla, Ph.D.  
Associate Director  
Product Safety  
(203/794-5230)

WCK/cr

Attachment (3 copies of cover letter, summary, and report)

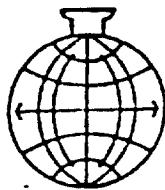
## SUMMARY

### FERTILITY AND GENERAL REPRODUCTIVE PERFORMANCE OF DIETHYLENE GLYCOL BUTYL ETHER IN RATS

Detailed Study Report  
January 10, 1984

# SUMMARY

2.



International Research  
and Development Corporation

MATTAWAN, MICHIGAN, U.S.A. 49071 TELEPHONE (616) 668-3336

SPONSOR: The Procter and Gamble Company

TEST ARTICLE (TSIN): B0547-01

SUBJECT: Study of Fertility and General Reproductive Performance in Rats

DRD NO.: BSBTS-796S2

DATE OF SUBMISSION: January 10, 1984

RECEIVED BY

JAN 16 1984

OPERATIONS SECTION

191-900

"credence through research"

## SUMMARY

3.

### II. SYNOPSIS

Charles River COBS® CD® male and female rats were used to determine the effects of B0547-01 on fertility and general reproductive performance. This study was comprised of six treated groups and one control group containing 25 males and 25 females each. The test article was administered orally by gavage to the males only in three groups beginning 60 days prior to mating and continuing until sacrifice; the females in these groups were not treated. In three other groups, the females only were dosed beginning 14 days prior to mating and continuing until sacrifice or weaning; male rats in these groups were not treated. Within each group, the treated animals were mated with their untreated counterparts. All treated animals received the test article orally by gavage at dosage levels of either 250, 500 or 1000 mg/kg/day as a single daily dose at a constant volume of 5 ml/kg. Both males and females in the control group received the vehicle only, deionized water, at a volume of 5 ml/kg on a comparable regimen and were similarly mated.

Approximately one-half of the mated females in each group underwent a uterine examination on gestation day 13 while the remaining females were allowed to deliver.

Among the groups of treated male rats, one rat died at the 500 mg/kg/day level and three rats died at the 1000 mg/kg/day level. Survival was 100% among males in the control and 250 mg/kg/day groups. These deaths occurred without apparent cause between study weeks 5 and 10 and no consistent pattern of antemortem or postmortem observations were evident. Among the treated female rats, two females died at the 250 mg/kg/day level, one was sacrificed in extremis at the 500 mg/kg/day level and three rats died at the 1000 mg/kg/day level. One untreated female in the male high dose group died. Survival was 100% among control females. Death or sacrifice in extremis among females occurred between

## SUMMARY

4.

study weeks 6 and 11 and no definite treatment related trends on external or necropsy observations were evident. With the exception of one low-dose female that died as the result of an intubation error, the cause of death could not be determined for any of the females that died. However, the postmortem findings from several animals were not inconsistent with aspiration pneumonitis. The only effect on appearance or behavior attributable to treatment with B0547-01 was a slight excess salivation among female rats dosed at 1000 mg/kg/day.

The mean weekly body weights of male rats dosed at the 1000 mg/kg/day level were slightly reduced during all treated study weeks. No effects on body weights were present among males dosed at 250 or 500 mg/kg/day or among females at any dosage level. Similarly, no meaningful effects were evident in maternal female body weights during gestation or lactation in any study group.

The only definite test article effect observed during the litter portion of this study was a reduction in mean pup body weights during the latter stages of lactation among the offspring of females dosed at the 1000 mg/kg/day level.

Analyses of reproductive data suggested that treatment with B0547-01 may have reduced the mean numbers of uterine implantations in both groups dosed at the 1000 mg/kg/day level (male and females). These findings were indicated by reductions in viable litter size at parturition and total implantations observed during weaning uterine examination. However, a similar effect was not evident at 13-day uterine examination wherein the mean numbers of implantations were comparable in all treated groups to concurrent and historical control values. A definite treatment effect was dubious.

No other effects attributable to treatment were present in either the parturition, litter or uterine examination data.

## SUMMARY

In conclusion, at a dose level of 1000 mg/kg/day, treatment with B0547-01 to female Charles River COBS® CD® rats caused a reduction in mean pup body weight during lactation and may have reduced mean uterine implantations. Treatment to male Charles River COBS® CD® rats at 1000 mg/kg/day may also have resulted in a reduction in uterine implantations in females to which they were mated, however a clear effect was not evident.

B0547-01 had no effects on fertility or reproductive performance in either male or female rats at dosage levels of 500 mg/kg/day and less.

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Attachment 3

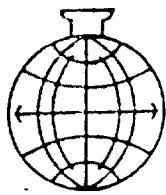
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↓ implantation  
↓ litter/fetal wt  
at highest  
dose only

FERTILITY AND GENERAL REPRODUCTIVE  
PERFORMANCE OF DIETHYLENE GLYCOL BUTYL ETHER IN RATS

Detailed Study Report  
January 10, 1984

Dam Primed P&C



International Research  
and Development Corporation

MATTAWAN, MICHIGAN, U.S.A. 49071 TELEPHONE (616) 668-3336

SPONSOR: The Procter and Gamble Company

TEST ARTICLE (TSIN): B0547-01

SUBJECT: Study of Fertility and General Reproductive Performance in Rats

DRD NO.: BSBTS-796S2

DATE OF SUBMISSION: January 10, 1984

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## I. QUALITY ASSURANCE STATEMENT

Study Title: Study of Fertility and General Reproductive Performance  
in Rats

Test Article: B0547-01

The conduct of this study has been subjected to periodic inspections.  
The dates of inspection and the dates that findings were reported to management and the Study Director are listed in Appendix A.

This report has been reviewed by the International Research and Development Corporation Quality Assurance Department in accordance with the United States Food and Drug Administration's Good Laboratory Practice Regulations of June 20, 1979.

Approved And  
Submitted By:

[REDACTED]  
Director of Quality Assurance

1/10/84  
Date

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Page 2

## II. SYNOPSIS

Charles River COBS® CD® male and female rats were used to determine the effects of B0547-01 on fertility and general reproductive performance. This study was comprised of six treated groups and one control group containing 25 males and 25 females each. The test article was administered orally by gavage to the males only in three groups beginning 60 days prior to mating and continuing until sacrifice; the females in these groups were not treated. In three other groups, the females only were dosed beginning 14 days prior to mating and continuing until sacrifice or weaning; male rats in these groups were not treated. Within each group, the treated animals were mated with their untreated counterparts. All treated animals received the test article orally by gavage at dosage levels of either 250, 500 or 1000 mg/kg/day as a single daily dose at a constant volume of 5 ml/kg. Both males and females in the control group received the vehicle only, deionized water, at a volume of 5 ml/kg on a comparable regimen and were similarly mated.

Approximately one-half of the mated females in each group underwent a uterine examination on gestation day 13 while the remaining females were allowed to deliver.

Among the groups of treated male rats, one rat died at the 500 mg/kg/day level and three rats died at the 1000 mg/kg/day level. Survival was 100% among males in the control and 250 mg/kg/day groups. These deaths occurred without apparent cause between study weeks 5 and 10 and no consistent pattern of antemortem or postmortem observations were evident. Among the treated female rats, two females died at the 250 mg/kg/day level, one was sacrificed in extremis at the 500 mg/kg/day level and three rats died at the 1000 mg/kg/day level. One untreated female in the male high dose group died. Survival was 100% among control females. Death or sacrifice in extremis among females occurred between

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Analyses of reproductive data suggested that treatment with B0547-01 may have reduced the mean numbers of uterine implantations in both groups dosed at the 1000 mg/kg/day level (male and females). These findings were indicated by reductions in viable litter size at parturition and total implantations observed during weaning uterine examination. However, a similar effect was not evident at 13-day uterine examination wherein the mean numbers of implantations were comparable in all treated groups to concurrent and historical control values. A definite treatment effect was dubious.

No other effects attributable to treatment were present in either the parturition, litter or uterine examination data.

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In conclusion, at a dose level of 1000 mg/kg/day, treatment with B0547-01 to female Charles River COBS® CD® rats caused a reduction in mean pup body weight during lactation and may have reduced mean uterine implantations. Treatment to male Charles River COBS® CD® rats at 1000 mg/kg/day may also have resulted in a reduction in uterine implantations in females to which they were mated, however a clear effect was not evident.

B0547-01 had no effects on fertility or reproductive performance in either male or female rats at dosage levels of 500 mg/kg/day and less.

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## **III. INTRODUCTION**

### **A. OBJECTIVE**

The objective of the study was to establish the effect of the test article on fertility, parturition, neonatal viability, growth of the newborn and reproductive performance in rats. This study design utilized treatment of both sexes.

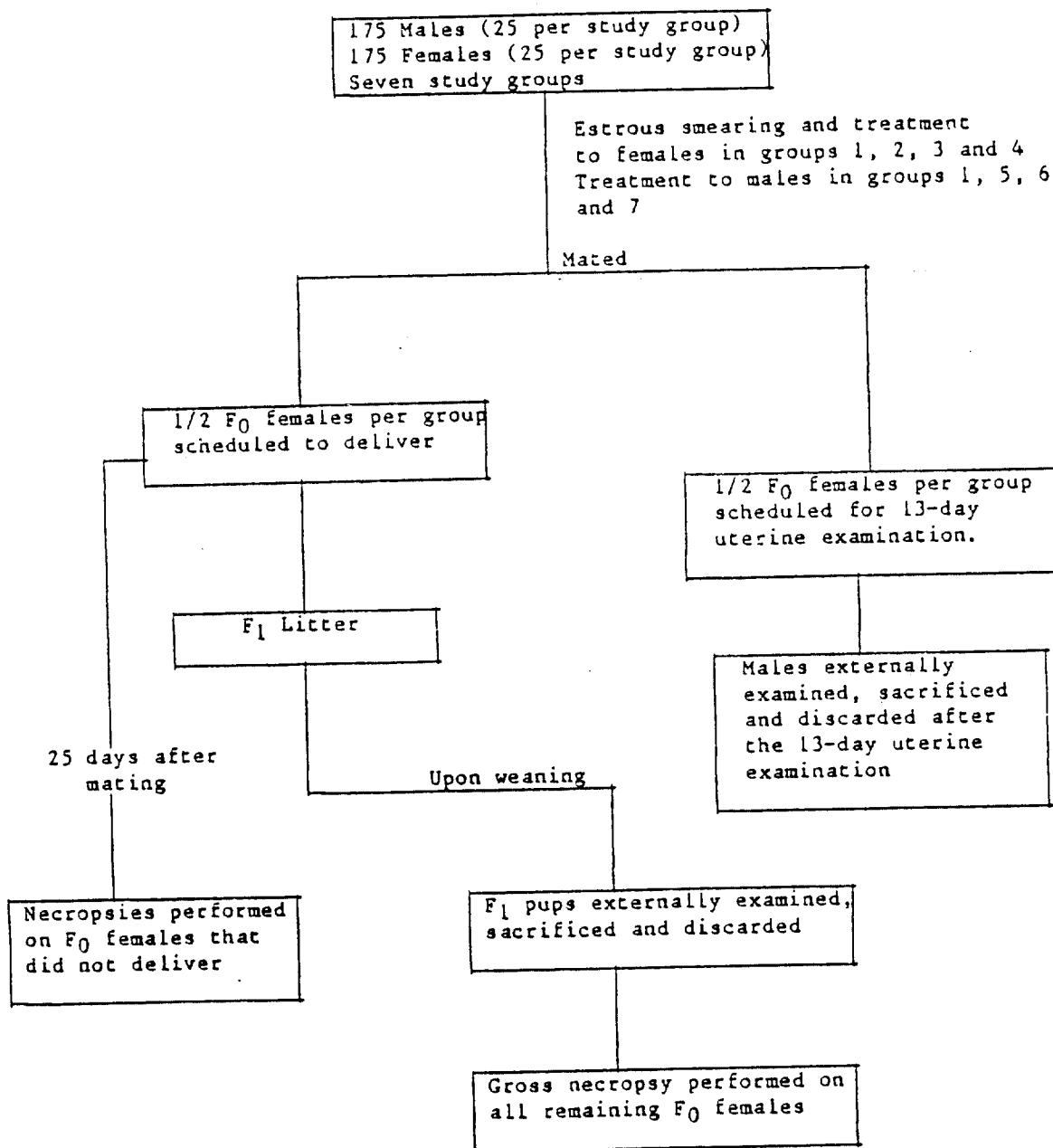
### **B. STUDY DESIGN**

This study was comprised of seven study groups containing 25 parental males and 25 parental females each. The test article, B0547-01, was administered to either the males or females in each treated group. In groups 2, 3 and 4, only female rats were treated and in groups 5, 6 and 7 only male rats were treated. The parental rats within each group ( $F_0$  generation) were mated (treated with untreated) to produce the next ( $F_1$ ) generation. For comparative purposes, male and female  $F_0$  control rats (group 1) both received the vehicle, deionized water. A diagrammatic representation of the study design is presented in Figure 1.

FIGURE 1.

## Study of Fertility and General Reproductive Performance in Rats

## STUDY DESIGN



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## C. TEST ARTICLE IDENTIFICATION

The test article utilized on this study was received in five shipments from the Procter and Gamble Company, Cincinnati, Ohio. The first test article allotment was received on December 2, 1982 as indicated below:

<u>Label</u>	<u>Description</u>
TEST SUBST. (TSIN) <u>B0547-01</u>	clear liquid
DIV. REQUEST DOC. (DRD) <u>BSBTS-796</u>	
DATE REC'D (OPR. SECTION)	
TYPE OF TEST <u>TERATOLOGY</u>	
GROSS WT. (INC. LID, CONT., LABEL) <u>1209.6 g.</u>	
*TARE WT. <u>353.1 g.</u> NET WT. <u>856.0 g.</u>	
STORAGE CONDITIONS <u>ROOM TEMP.</u>	
EXPIRATION DATE <u>NK</u>	
HAZARD <u>None</u>	
D.O.T. HAZARD <u>NON-HAZARDOUS</u>	
RETURN TO DIVISIONAL TOXICOLOGIST WHEN TEST <u>IS COMPLETED</u>	
*CONTAINER, LID, LABEL	

Additional shipments of the test article were received on December 30, 1982, January 26, 1983, March 9, 1983 and May 12, 1983. Specific label information for each of these shipments is stored in the IRDC archives and is available upon Sponsor request.

## D. VEHICLE CONTROL ARTICLE IDENTIFICATION

The vehicle control article used in this study was deionized water.

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## IV. METHODS AND PROCEDURES

This study was conducted in accordance with the protocol as approved by the Sponsor and in compliance with the Standard Operating Procedures of International Research and Development Corporation (IRDC). Procedures pertinent to this study are described herein.

### A. EXPERIMENTAL DESIGN

#### 1. Animals

The animals utilized on this study, Charles River COBS® CD® rats, were received in two shipments from the Charles River Breeding Laboratories, Inc., Portage, Michigan. The first shipment of 210, 28-day old male rats was received on February 23, 1983 and the second shipment of 210, virgin 70-day old female rats was received on March 31, 1983.

All rats were acclimated for a minimum of 15 days prior to placement on study.

From animal acquisition until sacrifice, the rats were provided with a basal laboratory diet of Purina® Certified Rodent Chow® #5002 and tap water available ad libitum and carefully observed for changes in appearance and behavior.

The basal laboratory diet, Purina® Certified Rodent Chow® #5002, was analyzed by the manufacturer for the presence of pesticides, heavy metals and aflatoxins. Each diet lot used was recorded. The drinking water at IRDC is analyzed quarterly for the presence of pesticides, heavy metals and coliforms. The results of these analyses are stored in the International Research and Development Corporation Archives at Mattawan, Michigan and are available upon request.

Throughout the study, all animals were housed in an environmentally controlled room. Temperature ranged between 20° and 24° C, humidity was maintained between 20% and 70% and fluorescent lighting provided illumination 12 hours per day. Temperature was below the range specified by

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the study protocol (21°-25° C) on two days and was inadvertently not recorded on six days. Humidity was below the specified range (35% to 65%) on 12 occasions and exceeded the range twice. All rats were individually housed, except during mating, gestation and lactation in suspended wire-mesh cages.

Each rat was identified by cage, group and individually by a Monel® metal ear tag bearing its animal number. The individual animal number plus the IRDC study number comprised a unique identification number for each animal. At study initiation (study week 0), male rats were 43 days of age and weighed from 165 to 215 grams. Females placed on study during week 6 were 91 days of age and weighed from 216 to 267 grams. At the time of placement on study, the body weights of 11 male rats slightly exceeded the protocol specified limit (210 grams) and the body weights of five females were slightly less than the limit (220 grams).

The study initiated with the randomization of F<sub>0</sub> males on March 9, 1983 and terminated with the last parental female sacrifice on July 6, 1983.

## 2. Organization of Test Groups

At the end of the acclimation period, all animals were weighed and subjected to a detailed physical examination. Animals considered suitable for study were randomly assigned to one control group and six treatment groups each containing 25 males and 25 females by the following computer-generated system. Animal numbers and corresponding body weights were entered onto magnetic tape which was used as the data source for the randomization procedure. Mean body weights and standard deviations were calculated by sex and a computer-generated edit developed a listing of those animals whose body weights were within  $\pm$  1.6 (males) or  $\pm$  1.5 (females) standard deviations of the mean. From the qualifying animals, the randomization procedure selected and assigned the required number of

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animals. Bartlett's test for homogeneity of variances was applied to the groups. If the groups were judged to be heterogeneous, new randomizations were generated until homogeneity was established. The following table illustrates the F<sub>0</sub> group arrangement.

<u>Animal and Treatment Designation</u>				
<u>Group Number</u>	<u>Number of Males</u>	<u>Number of Females</u>	<u>Sex Dosed</u>	<u>Dosage Level mg/kg/day</u>
1	25	25	males and females	0 (Control)
2	25	25	females only	250
3	25	25	females only	500
4	25	25	females only	1000
5	25	25	males only	250
6	25	25	males only	500
7	25	25	males only	1000

3. Mating

For females in groups 1, 2, 3 and 4, vaginal smears were conducted daily to establish estrus cycles beginning 10 days prior to test article administration. Smearing continued until evidence of mating was found or until the end of the mating period.

In both phases, each male was housed with one female of the same strain and source in plastic cages with wood chip (Beta Chip®) bedding for mating. The occurrence of copulation was determined by daily inspection for a copulatory plug or by vaginal inspection for sperm. The day that evidence of mating was detected was designated day 0 of gestation and the female was placed in an individual plastic cage.

Any female failing to show evidence of copulation after an initial 10-day period was remated for an additional five days with a male of proven fertility selected from the same group. At the end of the second mating period, all nonbred females were transferred to individual plastic cages containing bedding until sacrifice.

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## B. TEST ARTICLE ADMINISTRATION

The selected route of administration was oral since this has historically been the route of choice for administering a known quantity of test substance.

The appropriate amount of B0547-01 for each group was weighed daily into a graduated mixing cylinder and a sufficient quantity of the vehicle, deionized water, was added to yield the necessary volume of prepared test material. The cylinder was shaken by hand to ensure dissolution and the contents dispensed into a capped glass container.

The test article was prepared at concentrations to permit the administration of dose levels of 250, 500 and 1000 mg/kg/day at a constant dosage volume of 5 ml/kg.

The test article was administered orally by gavage as a single daily dose. The males in groups 5, 6 and 7 were dosed beginning 60 days prior to mating and continued until sacrifice. Males in groups 2, 3 and 4 were not dosed. Test article administration to females in groups 2, 3 and 4 began 14 days prior to mating and continued through weaning of the pups or until gestation day 13 sacrifice. Females in groups 5, 6 and 7 were not dosed. Nombred females were dosed until sacrifice. Both males and females in the control group received the vehicle only on comparable regimens at a volume of 5 ml/kg. Individual dosages were based on the most recently recorded body weights.

Males receiving the test article were mated with the untreated females from the same group and females receiving the test article were mated with the corresponding untreated males. Males and females both receiving the control substance were mated.

## C. F<sub>0</sub> PARENTAL OBSERVATIONS

### 1. Appearance and Behavior

From receipt until sacrifice both male and female rats were observed twice daily for mortality and overt changes in appearance and

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behavior. During treatment males and females were observed weekly in detail for clinical signs of toxicity. Untreated animals in both phases also received a detailed weekly examination.

## 2. Body Weights

Individual male (treated and untreated) body weights were recorded weekly from randomization until sacrifice. Individual female body weights (treated and untreated) were recorded weekly until evidence of copulation was observed or until sacrifice. Those dams selected for 13-day uterine examination were weighed on gestation days 0, 7 and 13 and the remaining dams, those allowed to deliver, were weighed on gestation days 0, 7, 13 and 20 and on lactation days 0, 7, 14 and 21.

## D. F<sub>0</sub> GESTATION DAY 13 UTERINE EXAMINATION OBSERVATIONS

On gestation day 13, approximately one-half of the mated females from each group were selected for uterine examination by the following method and sacrificed by carbon dioxide inhalation. Within each dosage group, each dam was assigned a consecutive placement number beginning with the number one. Of the females with evidence of copulation on any given day, one-half were selected by use of a table of random numbers for uterine examination. The remaining females were allowed to deliver. This process was continued daily until all females that evidenced mating had been assigned.

Immediately following sacrifice, a uterine examination was performed on each female. The number and location of viable and nonviable embryos, early resorptions, the total number of implantations and corpora lutea were recorded. Each implantation site, including resorptions, was consecutively numbered from the left uterine horn to the right uterine horn. The abdominal and thoracic cavities and organs of the dams were examined for grossly evident morphological changes and the carcasses discarded.

Uteri from females that appeared nongravid were opened and placed in 10% ammonium sulfide solution for confirmation of pregnancy<sup>1</sup>.

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## E. DISPOSITION OF MALES

At the completion of the 13-day uterine examinations, all F<sub>0</sub> treated and untreated males were examined externally, sacrificed and discarded.

## F. F<sub>0</sub> PARTURITION AND F<sub>1</sub> LITTER OBSERVATIONS

The remaining F<sub>0</sub> females from each group were allowed to deliver. During the period of expected parturition, the F<sub>0</sub> females were observed twice daily for newborn litters. Lactation day 0 was designated as the day the entire litter was found and delivery was judged complete. The duration of gestation was calculated and any difficulties occurring at parturition were recorded. On lactation day 0, the litters were examined for litter size, stillbirths, live births and any gross anomalies. Throughout lactation, the dams were observed daily for behavioral abnormalities in nesting and nursing. On lactation day 4, litter size was reduced to 10 pups, of equal sex whenever possible, by use of a random numbers table. The culled pups were externally examined and discarded. Pups were weighed individually on lactation days 0, 4, 7 and 14 and individually by sex on lactation day 21. All pups were observed daily for overt signs of toxicity, changes in appearance, behavior and mortality. Intact pups found dead during the lactation period were examined for anomalies, necropsied and discarded. The heart was dissected by a method similar to one described by Staples<sup>2</sup>.

On lactation day 21, all dams were examined, sacrificed, necropsied and the number of uterine implantation sites recorded. At weaning, all surviving pups were examined externally and sacrificed. If abnormalities were present, the pups were subjected to a gross necropsy. Pups that appeared normal were discarded.

On the 25th day after separation from the male, a gross necropsy was performed on all females where evidence of mating was found but failed to



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deliver. On the 25th day after termination of mating, this procedure was performed on all females where no evidence of mating was observed and which did not deliver. Any condition which would have prevented pregnancy was recorded. Uteri from females that appeared nongravid were opened and placed in 10% ammonium sulfide solution for confirmation of pregnancy<sup>1</sup>.

## G. STATISTICAL ANALYSIS

All statistical analyses compared the treatment groups to the control group with a level of significance at  $p<0.05$ . All means were accompanied by standard deviations.

### 1. Gestation Day 13 Uterine Examination Data

Mean postimplantation loss was compared by the Mann-Whitney U-test, as described by Siegel<sup>3</sup> and Weil<sup>4</sup>, to judge significance of differences. The mean numbers of corpora lutea, total implantations and viable embryos were compared by analysis of variance (one-way classification), Bartlett's test for homogeneity of variance and the appropriate t-test (for equal and unequal variances) as described by Steel and Torrie<sup>5</sup>, using Dunnett's<sup>6</sup> multiple comparison tables to judge significance of differences.

### 2. Litter Data

The male and female fertility indices were compared using the Chi-square test criterion with Yates' correction for  $2 \times 2$  contingency tables and/or Fisher's exact probability test as described by Siegel<sup>3</sup> to judge significance of differences. Pup survival indices on lactation day 4, 7, 14 and 21, and lactation indices (viable pups on lactation day 21 versus viable retained pups on lactation day 4) were compared by the Mann-Whitney U-test as described by Siegel<sup>3</sup> and Weil<sup>4</sup> to judge significance of differences.

Mean numbers of live pups per litter at birth and mean pup body weights recorded on lactation days 0, 4, 7, 14 and 21 were compared by

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analysis of variance (one-way classification), Bartlett's test for homogeneity of variances and the appropriate t-test (for equal and unequal variances), as described by Steel and Torrie<sup>5</sup> using Dunnett's<sup>6</sup> multiple comparison tables to judge significance of differences.

H. DATA RETENTION

All preservable specimens, raw data, a sample of the test article and copies of the final report are retained in the International Research and Development Corporation Archives in Mattawan, Michigan.

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## V. RESULTS

### A. PARENTAL OBSERVATIONS

#### 1. Appearance and Behavior

A summary of estrous cycle observations is presented in Table 1 and individual data are presented in Table 2.

No mortality was observed among the parental male rats in groups 1, 2, 3, 4 or 5. One treated male rat in group 6 and three treated male rats in group 7 died on study between study weeks 5 and 10. Following is a review of parental male mortality: animal #30942 dosed at the intermediate level (500 mg/kg/day) died during study week 10. This animal previously (approximately one month) had observations of red/brown colored urine and brown stained and matted ventral haircoat but showed no visible external abnormalities at the time of death. Postmortem observations disclosed black material in the stomach, white spots on both kidneys, purulent material in one kidney, reddish brown fluid and reddened mucosa in the urinary bladder, distended ureters and stones in the left kidney and ureter, and in the urinary bladder. The kidneys of this animal were preserved in 10% neutral buffered formalin but at the discretion of the Study Director, were not examined histopathologically. The specific cause of death could not be determined. Among the males dosed with 1000 mg/kg/day of the test article, animal #30961 died during study week 8. Necropsy disclosed a frothy red fluid in the trachea, congested lungs and red fluid in the thoracic cavity. Animal #30965 died during study week 7 with no internal abnormalities and animal #30982 died during week 5 with congestion in the azygous lobe of the lungs, reddened lining and red fluid in the trachea and white friable material in the urinary bladder. All of the group 7 males that died showed no abnormal clinical signs prior to death and the specific cause of death could not be determined. However, the aforementioned pulmonary findings were not inconsistent with technique-related aspiration of test article.

Among the parental female rats, no mortality occurred in groups 1, 5 and 6. A total of six females died on study: two, three and one in

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groups 2, 4 and 7, respectively. One additional female rat in group 3 was sacrificed in extremis. Following is an itemization of parental female mortality: In group 2, animal #31015 died with no visible abnormalities during study week 8. Postmortem examination revealed congested lungs, reddish clear fluid in the thoracic cavity and a 1 cm tear in the esophagus. The cause of death was determined to be intubation error. Animal #31029 (group 2) died during study week 11 with hair loss on the forelimbs. Necropsy disclosed congested lungs. In group 3, female #31034 had numerous clinical observations including wet matted anogenital haircoat, loss of righting reflex, dyspnea, hypoactivity, apparent hypothermia and emaciated and moribund appearance. This animal was sacrificed in extremis during week 11 and appeared normal internally. In group 4, animal #'s 31074 and 31082 both died with no visible abnormalities during study week 8. The former animal was normal internally while the latter had congested lungs and a small amount of green mucoid material in the intestines. Animal from the same group died during study week 9 and also had no external clinical observations and congested lungs. In group 7, untreated female #31138 died with no apparent abnormalities during week 6. Necropsy revealed red fluid and material (presumably blood) in the lungs and thoracic cavity; congested lungs, bronchi and thymus, and severe clotting around the anterior heart and great vessels. With the exception of the group 2 female previously mentioned, the cause of death could not be determined for any of the females that died on study. However, the aforementioned pulmonary findings were not inconsistent with technique-related aspiration of test article.

Administration of B0547-01 had no effect on the appearance or behavior of male rats at any dosage level. Some of the observations noted occasionally in one or more study groups included hair loss on the forelimbs, hindlimbs, ventral abdominal and inguinal regions; red or black material around the eyes; scabbing on the head, neck, shoulders and forelimbs; anogenital matting; excess salivation, and respiratory rales.

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No abnormalities attributable to the test article were noted in the estrous cycling of females treated at 250, 500 or 1000 mg/kg/day. Occasional observations of prolonged periods of estrous and diestrous were observed in all study groups including the control group.

The only apparent test article effect in females dosed with B0547-01 was excess salivation in the 1000 mg/kg/day group (group 4). Additional observations of hair loss on the forelimbs, ventral abdomen and ventral thorax, respiratory rales and dry black or red material around the nose occurred randomly among the study groups.

No abnormal postmortem observations were recorded for any treated female at either the gestation day 13 or lactation day 21 (weaning) uterine examinations. Untreated females in groups 1, 5, 6 and 7 had no meaningful necropsy observations.

A total of four female rats failed to deliver 25 days after separation from males and were sacrificed: one each in groups 2, 3, 4 and 5. Upon necropsy, all rats appeared normal internally and all but one (group 4) were nongravid.

## 2. Body Weights

Summaries of weekly group mean male and female body weights prior to mating are presented in Tables 3 and 5, respectively. Individual values are presented in Tables 4 and 6. A summary of group mean maternal body weight change during gestation and lactation is presented in Table 7 and individual values are presented in Table 8.

Administration of B0547-01 at the level of 1000 mg/kg/day caused a slight body weight depression in male rats throughout the measured study interval. These data did not indicate a cumulative toxic effect but rather a consistent body weight differential between the group 7 high dose

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and control group animals. This difference fluctuated between 2.9% (study week 3) and 7.3% (week 9) and averaged about 4.9%. No effects on male body weight attributable to treatment with B0547-01 were evident in groups 5 or 6. Body weights in groups 2, 3 and 4 were similarly comparable to those in the control group.

Mean weekly body weights of treated females in groups 2, 3 and 4 did not indicate a test article effect at any dosage level. Fluctuations in these values, relative to those in the control group, were present in group 3 during study week 10 and group 4 during study week 12. However, these means and the corresponding control means were based on only one or two animals each, thus negating any valid comparisons between the groups. Weekly mean body weights of the untreated females in study groups 5, 6 and 7 exceeded the control values during all study weeks measured.

Mean maternal body weight gains of females treated with B0547-01 at levels of 250, 500 and 1000 mg/kg/day were comparable to respective control values during all intervals of gestation and over the entire gestation period. Slight depressions in maternal body weight gain were present in group 3 during the first interval of lactation, days 0 to 7, and over the entire lactation period, days 0 to 21. However, similar data were not existent in group 4 and the values were considered random in origin. No other abnormalities in body weight gain were present in groups 2, 3 or 4 during any interval of lactation (lactation days 0 to 7, 7 to 14 or 14 to 21) or over the entire lactation period (days 0 to 21).

Mean maternal body weight gains of females in group 7 were slightly depressed relative to control values from gestation days 13 to 20 and 0 to 20 and from lactation days 0 to 7. However, because these females were not treated and because the values were within the normal range of variability for this species, no relation to the test article was assumed. The remaining body weight values for this group and for

groups 5 and 6 throughout gestation and lactation were all comparable to respective control group values.

3. 13-Day Uterine Examination Observations

A summary of group mean maternal 13-day uterine examination observations is presented in Table 9 and individual values are presented in Table 10. A summary of historical control values is presented in Appendix B.

When administered to female rats at dosage levels of 250, 500 and 1000 mg/kg/day, the test article had no effect on any of the 13-day uterine examination parameters assessed on this study. The mean values of corpora lutea, total implantations, postimplantation losses and viable embryos were all comparable in groups 2, 3 and 4 to group 1 control values.

Among the untreated females mated to male rats treated with the test article, a slight increase in mean postimplantation loss was noted at the highest dosage level (group 7). This value lacked statistical significance and similar findings were not noted in groups 5 or 6.

No biologically meaningful or statistically significant differences were noted in the mean numbers of corpora lutea, total implantations or viable embryos in groups 5, 6 or 7 when compared to respective group 1 control values.

4. Parturition and F<sub>1</sub> Litter Observations

A summary of gestation and lactation data is presented in Table 11. Individual data are presented in Table 12 and a summary of historical control data is presented in Appendix B.

The fertility indices of females dosed at the 250 and 500 mg/kg/day levels (groups 2 and 3) were reduced relative to the control value. However, both data were within the range of the historical control and similar findings were not noted in group 4. Further, the

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reduced pregnancy success rate present among the untreated males in groups 2 and 3 may have contributed to the decrease in female fertility: no relation to treatment with B0547-01 was assumed. The pregnancy rates of females in groups 5, 6 and 7 were not notably different relative to the control value.

Administration of the test article to male rats had no meaningful effects on male fertility at any dosage level. A slight reduction in male fertility was noted in group 6 (500 mg/kg/day). However, this value was within the range of variability for this species and a similar finding did not occur at the high dose level. The group 6 value was considered due to biological variation.

The mean gestation length was comparable in all dosage groups (treated and untreated females) to the control group. No differences attributable to treatment were evident in any study group, when compared to control values, regarding the mean numbers of stillborn pups. Mean viable litter size (live born pups) was slightly reduced in groups 4 and 7 when compared to the control group. A similar effect did not occur in groups 2, 3, 5 and 6.

Oral administration of B0547-01 to either male or female parental rats had no effect on the survival of ensuing offspring on days 0, 7, 14 or 21 of lactation. Slight depressions in pup survival were noted in groups 3 and 4 on lactation days 0 and/or 4. However, all values were within historical ranges and no consistent patterns indicative of a treatment effect were evident.

The mean body weight of F<sub>1</sub> pups on days 0 and 4 of lactation were not meaningfully different in study groups 2 through 7 when compared to group 1 values. Slight to moderate reductions in mean pup weight were evident in the highest female dosage group (group 4) on lactation days 7, 14 and 21 (male and female pups). The day 7 value was below the range

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of the historical control and the day 14 value was statistically significant at  $p<0.05$ . Slight depressions in pup weight were also present in groups 2 and 3. However, the differences from respective control values were minor and no relation to treatment was assumed.

No biologically meaningful abnormalities in mean pup body weight were evident in groups 5, 6 or 7 during any measured interval of lactation. The day 21 female body weight in group 7 was significantly higher ( $p<0.05$ ) than the control value but no treatment effect was suggested.

Observations at birth and throughout lactation failed to disclose any abnormalities in parturition or in parental nesting and nursing behavior in any study group. There were no notable trends regarding abnormal appearance or behavior of  $F_1$  pups during lactation in any study group. One or two pups each in groups 1 and 4 appeared bluish on lactation day 0. A total of 18  $F_1$  pups that died during lactation were necropsied: two each in groups 1 and 4, three each in groups 2 and 6 and four each in groups 3 and 5. No internal abnormalities were present in any of these pups.

## 5. Uterine Examination Observations at Weaning

A summary of group mean maternal uterine examination observations at weaning and post weaning is presented in Table 13. Individual data are presented in Table 14 and a summary of historical control values is presented in Appendix B.

Moderate reductions in the mean numbers of implantation sites with corresponding reductions in the mean numbers of delivered pups were present in the two groups dosed at the 1000 mg/kg/day level (groups 4 and 7). These data indicate a possible test article effect on ovulation, fertilization and/or nidation in group 4 or on spermatogenesis, fertilization and/or nidation in group 7. The mean numbers of remaining implantation sites (implantations not corresponding to delivered pups) were comparable in all treated groups to the control group; no discernable effects on embryonic or fetal development were evident.

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VI. SIGNATURES

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## VII. DISCUSSION AND CONCLUSION

Survival was 100% in groups 1 and 5. One male in group 6 and three males in group 7 died with no external abnormalities and of no apparent cause between study weeks 5 and 10. Postmortem observations noted among these animals included lesions and stones in the kidneys and in the associated organs of the urinary tract, fluid in and reddening of the trachea and congested lungs.

Two females in group 2, three females in group 4 and one female in group 7 died on study from weeks 6 to 11. One additional group 3 female with numerous clinical abnormalities was sacrificed in extremis during study week 11. No internal abnormalities were evident upon necropsy of this animal. Postmortem examination of the females that died on study disclosed occasional observations of congested lungs, fluid in the thoracic cavity, mucoid material in the intestines and red clotted material (presumably blood) around the cardiopulmonary organs. One female in group 2 had a 1 cm tear in the esophagus and presumably died as the result of intubation error. The cause of death could not be determined for the remaining animals. However, the postmortem findings from several animals were not inconsistent with aspiration pneumonitis.

No changes in appearance or behavior were evident in any group of male rats treated with B0547-01. Observations such as hair loss and/or scabbing (limbs, shoulders, inguinal and abdominal regions), red or black material around the eyes, matted haircoat, and excess salivation were noted occasionally in one or more study groups. Females responded to treatment with B0547-01 with slight increases in excess salivation in group 4 (1000 mg/kg/day) only. No other meaningful abnormalities in appearance or behavior were evident among treated females. Necropsy observations of treated females were comparable in all dosage groups to the control group.

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A slight depression in weekly male body weight was present throughout the measured period in the 1000 mg/kg/day group (group 7) only. No effects on male body weight were evident in groups 2 through 6. Treatment with B0547-01 had no definite influence on weekly female body weights at any dosage level. Slight depressions were present in groups 3 and 4 during study weeks 10 and 12, respectively. However, mating and mortality had reduced the sample size in each group to only two rats each, thus valid comparisons could not be made. Analysis of mean maternal body weight data failed to disclose a definite treatment effect on maternal body weight gain in any study group. Slight depressions in body weight gain were noted in group 3 from lactation days 0 to 7 and 0 to 21 and in group 7 from gestation days 13 to 20, 0 to 20 and lactation days 0 to 7. The fluctuations present in the former group were not replicated at the next highest dose level and were considered of random occurrence. The depressions present in the latter group were not large enough to be considered meaningful.

Treatment with B0547-01 to either male or female rats at dosage levels from 250 to 1000 mg/kg/day had no meaningful effects on any of the uterine examination parameters. A slight increase in postimplantation loss occurred in group 7. However, this value represented treated males only, lacked statistical significance and was within historical control ranges. Further, concurring data were not present at weaning uterine examination; no relation to treatment was assumed. The mean postimplantation loss in the remaining groups and the mean numbers of corpora lutea, total implantations and viable fetuses were uniform in all study groups.

No meaningful differences indicative of a test article effect on either male or female fertility were present in the treated groups when compared to the control group. Slight variations were noted in some of the groups but were considered due to biological variation. The mean

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gestation length and mean numbers of stillborn pups were uniform in all study groups including the control group. Slight reductions in the mean numbers of liveborn pups were present in both groups dosed at the 1000 mg/kg/day level (groups 4 and 7). These findings were substantiated by observations of reduced total implantations at the lactation day 21 (weaning) uterine examination. No effects on liveborn litter size were noted in any group dosed at 250 or 500 mg/kg/day.

Pup survival indices during lactation were not meaningfully different in the treated groups relative to concurrent and historical control values.

The mean body weights of pups born from females dosed at 1000 mg/kg/day were moderately reduced on lactation days 7, 14 and 21 (pups of both sex). The day 7 value was outside the range of the historical control and the day 14 value was statistically significant at  $p<0.05$ . Pup weight values were also slightly reduced in this group on lactation days 0 and 4 but the differences were not large enough to be considered meaningful. No other effects on mean pup body weights attributable to treatment were present in any other dosage group during the measured intervals of lactation.

Analysis of the lactation day 21 (weaning) uterine examination data indicated that reductions in total implantations present in groups 4 and 7 resulted in the decrease in live pups noted at parturition. These findings suggest a possible test article effect on the processes leading to and including nidation, i.e., spermatogenesis, ovulation and fertilization. However, because no influences on corpora lutea or total implantations or viable embryos were evident in the gestation day-13 uterine examination data, the effects of treatment with B0547-01, if any, were dubious.

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The mean numbers of implantation sites not corresponding to delivered pups were comparable in all dosage groups to the control group. No effects on embryonic or fetal development were observed.

In conclusion, treatment with B0547-01 to female Charles River COBS® CD® rats at 1000 mg/kg/day probably reduced the body weights of offspring from days 4 to 21 of lactation and may have depressed the mean number of implantations by an effect on ovulation, fertilization or implantation. Treatment of male Charles River COBS® CD® rats at the same dosage level may also have influenced spermatogenesis, fertilization or nidation as evidenced by a reduction in total implantations. However, a definite treatment related effect was dubious. Treatment with B0547-01 to either male or female rats had no effects on fertility or reproductive performance at dose levels of 250 or 500 mg/kg/day.

To the best of my knowledge, there were no significant deviations from the Good Laboratory Practice Regulations which affected the quality and integrity of the study. This study was conducted in conformance with the Good Laboratory Practice Regulations. This report accurately reflects the raw data obtained during the performance of the study.

[REDACTED]

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Data

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TABLE I.

## Analysis of Estrous Cycle Observations

Finding In Period	80547-01 mg/kg/day (Group Number) <sup>a</sup>							
	0 (Control) (1)		250 (2)		500 (3)		1000 (4)	
No.	%	No.	%	No.	%	No.	%	
<b>Untreated Premating Period</b>								
Long Diestrous	3	12.0	6	24.0	4	16.0	2	8.0
Long Estrous	2	8.0	2	8.0	2	8.0	0	0.0
Long Post-estrous	1	4.0	1	4.0	0	0.0	0	0.0
Irregular Cycle	0	0.0	1	4.0	0	0.0	0	0.0
<b>Treated Premating Period</b>								
Long Diestrous	10	40.0	11	44.0	6	24.0	5	20.0
Long Estrous	2	8.0	2	8.0	2	8.0	1	4.2
Long Post-estrous	1	4.0	0	0.0	0	0.0	0	0.0
Irregular Cycle	2	8.0	2	8.0	0	0.0	1	4.2
<b>Mating Period</b>								
Long Diestrous	2	8.0	2	8.3	2	8.0	3	13.0
Long Estrous	0	0.0	0	0.0	0	0.0	0	0.0
Long Post-estrous	0	0.0	0	0.0	0	0.0	0	0.0
Irregular Cycle	0	0.0	0	0.0	0	0.0	0	0.0

<sup>a</sup>Only females dosed

Long Diestrous - Diestrous greater than 5 consecutive days

Long Estrous - Estrous greater than 1 day

Long Post-estrous - Post-estrous greater than 1 day

Irregular Cycle - Other deviations from normal estrous cycle i.e.

Post-Post-E, E-OI-E, Post-OI-Post, E-Pro-Post

Pro - Proestrous

OI - Oestrous

E - Estrous

TABLE 2.  
Daily Estrous Cycle Observations

Group Number, Dosage Level, Female Number	Day of Estrous Smearing Prior to Treatment										Day of Estrous Smearing During Treatment, Prior to Mating													
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12	13	14
(1), 0.5g/kg/day (Control):																								
30984	D1	D1	E	Post	D1	D1	E	D1	D1	E	Post	D1	D1	E	D1	D1	E	D1	D1	E	Post	D1		
30985	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1		
30986	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1		
30987	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E		
30988	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1		
30989	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1		
30990	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1		
30991	Post	D1	D1	E	D1	D1	E	D1	D1	E	Post	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1		
30992	D1	D1	Pro	E	D1	D1	Pro	E	D1	D1	Pro	E	D1	D1	Pro	E	D1	D1	Pro	E	D1	D1		
30993	Pro	Post	D1	D1	E	Post	D1	D1	E	Post	D1	D1	E	Post	D1	D1	E	Post	D1	D1	E	Post	D1	
30994	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1		
30995	E	Post	D1	D1	E	D1	D1	E	D1	D1	E	Post	D1	D1	E	D1	D1	E	D1	D1	E	D1		
30996	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1		
30997	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E		
30998	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E		
30999	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E		
31000	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1		
31001	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E		
31002	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E		
31003	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1		
31004	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E		
31005	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1		
31006	E	Post	D1	D1	E	Pro	E	D1	D1	E	Post	D1	D1	E	Post	D1	D1	E	Post	D1	D1	E		
31007	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1		
31008	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1		

DI - Diestrus

E - Estrus

Post - Post-estrous

Pro - Proestrus

TABLE 2. Cont.

## Daily Estrous Cycle Observations

Group Number, Dosage Level, Female Number	Day of Estrous Smearing During Matting													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
(1), 0 mg/kg/day (Control):														
30984	a													
30985	DI													
30986	a													
30987	a													
30988	DI													
30989	DI													
30990	DI													
30991	DI													
30992	DI													
30993	DI													
30994	DI													
30995	DI													
30996	DI													
30997	DI													
30998	DI													
30999	DI													
31000	DI													
31001	DI													
31002	Pro	a												
31003	a													
31004	DI													
31005	DI	a												
31006	E	Post												
31007	DI	a												
31008	DI	a												

DI - Diestrus

E - Estrus

Post - Post-Estrus

Pro - Proestrus

<sup>a</sup>Evidence of copulation<sup>b</sup>No evidence of copulation, mating complete, estrous smearing discontinued

TABLE 2. Cont.

Group Number, Test Article, Dosage Level, Female Number	Daily Estrous Cycle Observations																							
	Day of Estrous Starting Prior to Treatment																							
1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
(2), B0547-01, 250 mg/kg/day:																								
31009	D1	D1	E	Post	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	Post
31010	D1	D1	Pro	E	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	Post
31011	D1	D1	Pro	E	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	Post
31012	D1	E	D1	D1	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	Post
31013	D1	D1	E	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	D1	Post
31014	D1	D1	E	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	D1	Post
31015	Pro	E	D1	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	D1	Post
31016	D1	D1	Pro	E	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	Post
31017	D1	D1	E	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	D1	Post
31018	D1	E	D1	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	D1	Post
31019	E	E	Post	Post	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	Post
31020	D1	D1	E	Post	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	Post
31021	D1	D1	E	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	D1	Post
31022	D1	D1	E	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	D1	Post
31023	D1	D1	E	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	D1	Post
31024	D1	D1	E	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	D1	Post
31025	D1	D1	E	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	D1	Post
31026	D1	D1	E	D1	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	D1	Post
31027	D1	E	D1	D1	E	Post	D1	D1	E	D1	D1	Post												
31028	D1	E	D1	D1	E	Pro	E	D1	D1	E	D1	E	D1	D1	Post									
31029	E	D1	E	D1	E	Post	D1	D1	E	D1	E	D1	D1	E	Post									
31030	Pro	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	D1	Post
31031	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	Post												
31032	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	Post												
31033	Post	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	D1	Post

D1 - Diestrus

E - Estrus

Post - Post-estrous

Pro - Proestrous

TABLE 2. Cont.

## Daily Estrous Cycle Observations

Group Number, Test Article, Dosage Level, Female Number	Day of Estrous Smearing During Matting														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
(2), 80547-01,															
250 mg/kg/day Cont'd.															
31009	D1	a	D1	D1	Post	D1									
31010	D1	D1	D1	a											
31011	D1	a													
31012	a														
31013	D1	D1	E	D1	D1	D1	D1	D1	D1	D1	D1	D1	D1	D1	D1
31014	D1	D1	a												
31015	D1	a	D1	D1	a										
31016	D1	D1	D1	a											
31017	D1	D1	a												
31018	D1	D1	Pro	a											
31019	a														
31020	D1	a													
31021	a														
31022	D1	D1	a												
31023	D1	a													
31024	D1	D1	E	D1	D1	E	D1	D1	D1	E	D1	D1	D1	D1	E <sup>b</sup>
31025	D1	a													
31026	D1	D1	Post	a											
31027	a														
31028	a														
31029	D1	D1	a												
31030	a														
31031	D1	a													
31032	D1	D1	a												
31033	D1	D1	Pro	a											

D1 - Diestrus

E - Estrus

Post - Post-Estrus

Pro - Proestrus

TABLE 2. Cont.

Group Number, Test Article, Dosage Level, Female Number	Daily Estrous Cycle Observations															Day of Estrous Smearing During Treatment, Prior to Matting										
	Day of Estrous Smearing Prior to Treatment															Day of Estrous Smearing During Treatment, Prior to Matting										
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
(3), B0547-01, 500 mg/kg/day:																										
31034	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	
31035	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	
31036	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E									
31037	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	
31038	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E									
31039	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E									
31040	Post	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	Post	
31041	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	
31042	D1	D1	E	Post	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E									
31043	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	
31044	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	
31045	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	
31046	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1									
31047	D1	D1	E	Post	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E									
31048	D1	Pro	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	
31049	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E									
31050	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1									
31051	E	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	
31052	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	
31053	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	
31054	D1	D1	E	Post	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E									
31055	Post	D1	D1	E	Pro	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1									
31056	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	
31057	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E									
31058	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	

DI - Diestrous

E - Estrous

Post - Post-estrous

Pro - Proestrus

TABLE 2. Cont.

Group Number, Test Article, Dosage Level, Female Number	Day of Estrous Smearing During Mating														Sacrificed
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
(3), 80547-01, 500 mg/kg/day Cont.															
31034	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di
31035	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di
31036	a														
31037	Di	Di	Di	a											
31038	Di	Di	Di	Pro	a										
31039	Di	Di	Di	Di	a										
31040	Di	Di	Di	Pro	a										
31041	Di	Di	Di	E	Di	Di	Di	a							
31042	Di	a													
31043	Di	a													
31044	Di	Di	a												
31045	Pro	a													
31046	a														
31047	a														
31048	Di														
31049	a														
31050	a														
31051	a														
31052	Di	a													
31053	Di	a													
31054	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	a
31055	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	a
31056	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	a
31057	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	Di	a
31058	Di	Di	a												

Di - Diestrus

E - Estrus

Post - Post-Estrus

Pro - Proestrus

a Evidence of copulation

b No evidence of copulation, mating complete, estrous smearing discontinued

TABLE 2. Cont.  
Daily Estrous Cycle Observations

Group Number, Test Article, Dosage Level, Female Number	Day of Estrous Smearing Prior to Treatment															Day of Estrous Smearing During Treatment, Prior to Matting									
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
(4), B0247-01,																									
31059	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	
31060	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	
31061	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	D1	E	
31062	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	
31063	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	
31064	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	
31065	Post	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E
31066	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E
31067	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E
31068	D1	D1	E	Post	D1	C1	D1	D1	E	Post	D1	D1	E	Post	D1	D1	E	Post	D1	D1	E	Post	D1	D1	E
31069	D1	E	D1	D1	Pro	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	
31070	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	
31071	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E
31072	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	
31073	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E
31074	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E
31075	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	
31076	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	
31077	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	
31078	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	
31079	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	
31080	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E
31081	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	
31082	E	Post	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	Post	D1	D1	E	Post	D1	D1	E
31083	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	D1	D1	E	Post	D1	D1	E	Post	D1	D1	E

D1 - Diestrus

E - Estrus

Post - Post-estrous

Pro - Proestrus

TABLE 2. Cont.  
Daily Estrous Cycle Observations

Group Number, Test Article, Dosage Level, Female Number	Day of Estrous Smearing During Mating													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
(4), 8047-01,														
1000 mg/kg/day Cont.:.														
31059	a													
31060	a													
31061	DI	DI	DI	a										
31062	DI	Pro	a											
31063	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	a
31064	a													
31065	a													
31066	DI	DI	DI	a										
31067	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	D <sup>b</sup>
31068	DI	Pro	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	
31069	DI	DI	Post	a										
31070	DI	a												
31071	DI	DI	DI	a										
31072	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	D <sup>b</sup>
31073	DI	DI	Post	a										
31074	Died													
31075	DI	a												
31076	DI	a												
31077	DI	DI	a											
31078	DI	a												
31079	DI	a												
31080	DI	DI	DI	a										
31081	DI	a												
31082	Died													
31083	a													

DI - Diestrus

E - Estrus

Post - Post-Estrus

Pro - Proestrus

<sup>a</sup>Evidence of copulation, mating complete, estrous smearing discontinued<sup>b</sup>No evidence of copulation, mating complete, estrous smearing discontinued

TABLE 3.

MALES: Summary of Weekly Group Mean Body Weights

Study Week	0 mg/kg/day (Control) (1)			250 FD (2)			B0547-01 mg/kg/day (group number) 500 FD (3)			B0547-01 mg/kg/day (group number) 1000 FD (4)		
	Mean Body Weight (g)	Standard Deviation ( $\pm$ )	N	Mean Body Weight (g)	Standard Deviation ( $\pm$ )	N	Mean Body Weight (g)	Standard Deviation ( $\pm$ )	N	Mean Body Weight (g)	Standard Deviation ( $\pm$ )	N
0	19.1	11.7	25	19.1	15.4	25	18.4	10.7	25	19.4	15.4	25
1	25.0	16.8	25	25.3	18.8	25	24.4	13.7	25	25.3	27.1	25
2	30.0	21.6	25	30.4	25.8	25	29.1	17.3	25	30.2	25.9	25
3	33.9	26.7	25	34.7	29.1	25	33.1	21.3	25	34.3	29.9	25
4	37.6	29.9	25	38.5	33.0	25	36.5	25.6	25	37.8	33.5	25
5	40.6	33.6	25	41.7	38.6	25	39.3	27.6	25	40.6	37.8	25
6	43.1	37.9	25	44.3	42.3	25	41.7	30.8	25	42.9	40.3	25
7	44.8	40.6	25	46.1	46.4	25	45.8	35.0	25	44.8	44.0	25
8	46.9	43.0	25	48.1	50.8	25	45.7	36.5	25	46.8	47.9	25
9	46.8	44.2	25	47.9	50.8	25	45.6	35.8	25	46.3	45.7	25
10	48.4	47.3	25	49.5	51.5	25	47.4	35.0	25	48.6	44.4	25
11	49.8	51.5	25	50.9	52.6	25	48.8	36.9	25	49.5	46.9	25
12	49.9	47.3	25	52.1	56.8	25	49.6	37.9	25	50.1	50.3	25

N = Number of animals utilized in calculation of means, remaining males died  
 FD = Only females dosed

TABLE 3. Cont.

MALES: Summary of Weekly Group Mean Body Weights					
B0547-01 mg/kg/day (group number)					
250 <sup>MD</sup> (5)			500 <sup>MD</sup> (6)		
Study Week	Mean Body Weight (g)	Standard Deviation ( $\pm$ )	Mean Body Weight (g)	Standard Deviation ( $\pm$ )	N
0	187	11.4	195	11.7	25
1	246	16.4	256	14.2	25
2	294	17.8	307	18.1	25
3	333	22.5	349	22.5	25
4	370	25.8	384	29.6	25
5	401	27.7	410	34.4	25
6	428	29.8	434	41.0	25
7	448	33.0	453	42.7	25
8	470	36.0	473	45.8	25
9	467	37.1	470	46.4	25
10	486	36.5	493	49.3	24
11	501	38.5	505	52.1	24
12	510	41.0	509	53.9	24

N - Number of animals utilized in calculation of means, remaining males died  
 MD - Only males dosed

TABLE 4.

## Individual Weekly Male Body Weights

Group Number, Test Article, Dosage Level, Male Number	Study Week												
	0	1	2	3	4	5	6	7	8	9	10	11	12
<u>(1), 0 mg/kg/day (Control):</u>													
30809	179	227	276	312	343	373	396	418	435	435	449	454	453
30810	203	266	319	359	400	432	469	501	526	517	547	552	554
30811	188	244	292	339	375	408	431	452	475	467	484	482	500
30812	184	234	286	324	365	388	412	424	437	445	460	466	475
30813	189	249	307	341	380	413	437	459	482	494	503	517	532
30814	208	267	319	358	398	428	457	478	504	497	519	537	538
30815	211	278	330	374	416	441	468	484	513	518	526	550	555
30816	188	256	314	361	401	437	457	473	488	495	494	508	504
30817	192	244	284	302	329	350	372	381	403	400	424	442	444
30818	196	248	292	324	354	380	398	408	425	423	432	415	437
30819	195	265	323	375	413	450	478	500	515	520	544	562	471
30820	190	248	306	345	377	412	437	456	475	469	483	501	520
30821	207	260	305	340	378	409	439	457	468	466	482	494	506
30822	184	251	311	358	410	443	470	491	516	518	540	568	576
30823	180	221	251	301	337	365	387	404	428	417	426	453	460
30824	189	252	307	349	393	422	450	465	482	485	492	503	522
30825	190	246	299	343	377	414	448	466	488	500	527	541	557
30826	210	274	328	374	419	457	487	497	525	522	534	556	560
30827	193	255	311	344	384	420	448	464	485	487	511	533	542
30828	170	223	262	297	331	351	369	393	413	402	418	426	427
30829	172	228	277	324	355	391	412	428	440	452	453	466	472
30830	211	278	333	376	412	446	480	505	535	529	557	578	503
30831	184	242	289	326	352	380	396	398	415	420	429	450	465
30832	181	223	260	288	317	337	351	364	381	377	388	396	399
30833	189	261	313	353	387	415	429	442	462	454	474	489	500
<u>(2), B0547-01, 250 mg/kg/day:</u>													
30834	198	256	315	352	381	409	437	458	487	470	486	497	487
30835	204	269	328	379	422	460	486	491	525	527	516	554	569
30836	165	222	270	319	355	380	408	425	445	440	456	466	470
30837	165	215	260	285	316	333	351	363	381	386	389	393	400
30838	182	249	294	330	368	394	422	437	459	460	471	489	497
30839	203	278	338	377	421	458	483	510	541	524	535	549	557
30840	195	265	319	364	403	434	468	483	492	495	507	523	526
30841	191	267	331	380	437	482	518	550	583	571	594	627	648
30842	200	266	324	369	435	480	524	553	582	580	618	608	641
30843	197	271	337	382	433	473	509	527	550	563	571	576	594
30844	196	261	316	361	400	430	451	470	495	498	518	534	544
30845	201	265	325	368	405	435	459	481	496	505	521	537	541
30846	178	246	293	329	372	397	433	447	467	453	465	468	500
30847	214	268	305	342	370	388	405	417	426	417	440	456	460
30848	165	221	236	291	330	371	390	420	440	440	468	474	480
30849	206	265	317	356	396	422	455	476	503	497	509	519	542
30850	166	218	269	308	336	372	443	404	425	416	441	463	479
30851	205	274	321	356	392	421	414	455	467	478	486	494	507
30852	174	248	298	334	364	390	465	434	439	441	467	473	479
30853	185	246	304	350	400	439	422	480	503	515	532	548	556
30854	205	236	280	326	367	407	423	444	460	444	467	477	484
30855	199	265	323	375	414	462	483	513	530	519	533	556	560
30856	191	253	304	332	364	386	400	416	426	431	448	466	469
30857	178	236	284	318	358	379	404	421	442	442	455	477	490
30858	213	269	312	355	389	415	427	448	461	461	486	505	540

TABLE 4. Cont.

## Individual Weekly Male Body Weights

Group Number,  
Test Article,  
Dosage Level,  
Male Number

Study Week

	0	1	2	3	4	5	6	7	8	9	10	11	12
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(3),  
B0547-01,  
500 mg/kg/day:

30859	195	262	314	357	388	416	430	463	480	477	482	470	494
30860	193	252	307	343	384	413	441	457	490	482	499	495	515
30861	188	253	305	353	400	438	472	505	532	511	533	542	542
30862	181	236	277	315	342	373	398	419	429	435	455	475	480
30863	177	237	286	332	364	402	429	459	490	500	519	537	553
30864	201	268	322	360	408	433	458	485	489	489	508	529	537
30865	200	260	312	347	388	417	437	452	445	451	468	492	503
30866	167	228	266	303	347	368	395	417	434	444	467	482	488
30867	168	215	260	290	319	340	360	373	392	389	417	429	436
30868	191	257	318	364	403	438	470	492	514	513	532	554	556
30869	174	226	272	304	329	364	379	389	407	403	410	424	431
30870	177	235	282	317	350	376	399	424	444	436	471	486	490
30871	195	248	288	319	349	370	388	402	417	417	434	444	454
30872	178	247	295	340	379	410	440	470	493	494	514	534	540
30873	196	258	306	355	389	418	446	464	478	471	475	500	490
30874	186	246	292	337	374	383	421	454	469	464	485	500	509
30875	176	242	290	326	350	370	381	417	447	445	467	479	475
30876	177	239	293	347	388	418	443	464	484	498	500	517	534
30877	184	247	290	333	369	389	418	435	454	450	468	472	482
30878	196	248	284	311	342	366	381	387	402	398	411	422	433
30879	170	227	265	294	321	350	371	388	403	401	423	435	431
30880	185	248	299	346	381	410	432	458	479	469	490	513	525
30881	177	221	266	307	342	378	403	421	445	449	475	488	504
30882	199	258	301	340	370	401	422	443	460	463	477	497	506
30883	172	234	283	329	354	379	407	420	443	445	467	483	496

(4),  
B0547-01,  
1000 mg/kg/day:

30884	196	255	298	332	360	393	418	429	447	448	464	470	479
30885	168	162	234	277	315	341	360	372	387	385	406	417	421
30886	180	247	309	366	414	458	487	519	551	550	573	575	587
30887	191	265	327	381	419	458	482	502	527	482	520	545	556
30888	215	287	341	388	431	468	503	524	553	549	559	567	586
30889	165	204	247	278	311	338	361	374	391	395	511	420	430
30890	186	247	290	332	363	376	415	440	456	453	476	491	503
30891	171	231	286	324	353	412	390	413	433	433	446	498	479
30892	190	255	300	342	384	376	433	463	484	474	498	509	527
30893	200	254	293	326	354	366	392	412	421	423	436	449	454
30894	198	252	286	315	348	372	385	401	424	420	433	438	445
30895	168	227	275	311	340	368	397	412	430	428	443	450	453
30896	206	274	330	373	407	429	449	468	486	470	496	501	503
30897	210	276	329	369	409	428	460	478	490	488	521	534	560
30898	186	246	291	328	352	441	387	398	424	426	436	444	439
30899	178	234	279	318	346	377	399	418	444	442	461	465	455
30900	215	274	318	350	384	376	421	435	439	431	450	457	459
30901	215	285	329	373	403	404	448	465	488	472	492	501	505
30902	190	254	299	342	378	421	426	446	458	455	470	483	496
30903	214	278	322	368	400	401	451	462	484	483	495	518	523
30904	200	264	305	356	372	425	422	441	454	454	479	496	509
30905	197	256	304	344	381	406	430	457	470	474	488	499	513
30906	199	265	316	359	391	416	438	452	471	461	478	498	494
30907	199	266	314	364	410	436	463	489	514	528	548	555	568
30908	204	275	332	381	430	472	504	535	566	561	568	584	577

TABLE 4. Cont.

Individual Weekly Male Body Weights

Group Number, Test Article, Dosage Level, Male Number	Study Week												
	0	1	2	3	4	5	6	7	8	9	10	11	12
<u>(5), 80547-01, 250 mg/kg/day:</u>													
30909	195	256	306	348	398	425	456	490	508	513	531	552	565
30910	196	262	313	362	394	422	453	467	488	480	503	509	506
30911	174	277	290	333	379	415	437	453	468	468	484	501	511
30912	180	237	287	320	358	389	414	431	447	448	470	485	496
30913	174	227	271	304	358	364	398	411	439	433	446	455	473
30914	197	261	323	368	419	450	478	500	530	522	542	571	579
30915	177	236	283	323	356	392	423	441	468	467	476	487	492
30916	179	227	276	311	337	367	383	406	418	412	429	439	448
30917	165	213	263	290	332	363	386	415	437	434	457	469	482
30918	194	262	311	358	400	433	463	485	515	500	512	530	540
30919	200	251	294	338	379	409	436	452	480	480	488	501	529
30920	195	263	320	366	410	448	476	510	541	540	555	563	574
30921	193	260	318	361	389	428	459	482	506	517	534	548	567
30922	181	243	292	338	374	409	427	462	478	486	511	530	545
30923	181	234	273	304	335	363	387	406	431	428	455	471	477
30924	196	262	320	369	413	450	483	513	541	538	559	573	586
30925	199	258	303	344	374	411	433	451	475	472	489	505	503
30926	180	227	275	313	342	371	395	410	440	438	467	486	498
30927	198	256	301	335	368	393	412	431	440	436	450	461	464
30928	174	228	277	311	346	373	399	414	432	424	434	448	452
30929	192	253	295	326	362	386	414	450	453	445	468	481	483
30930	203	252	297	335	367	389	415	429	441	435	460	466	471
30931	199	253	306	339	344	399	423	444	452	463	481	481	486
30932	168	225	272	309	365	381	408	427	445	436	467	501	507
30933	177	250	280	326	368	399	431	450	469	469	491	504	516
<u>(6), 80547-01, 500 mg/kg/day:</u>													
30934	184	237	278	317	340	358	379	388	409	405	434	428	443
30935	207	265	314	362	400	434	459	475	496	492	502	517	529
30936	190	254	307	345	376	401	420	428	456	456	496	501	509
30937	188	256	313	362	395	421	450	476	493	483	517	530	525
30938	174	229	285	322	360	391	399	437	457	458	472	478	484
30939	200	255	295	332	369	397	391	440	449	457	476	489	493
30940	187	253	304	354	382	416	459	478	504	494	524	542	557
30941	189	251	298	351	386	415	443	456	483	477	493	497	497
30942	182	244	295	332	360	352	362	395	421	421	Died		
30943	209	265	316	340	372	400	418	439	453	455	475	438	495
30944	215	293	351	400	453	477	519	550	582	582	607	630	625
30945	178	245	306	359	407	440	462	493	509	504	541	559	577
30946	200	261	316	362	409	439	469	489	507	520	531	557	557
30947	199	253	293	330	353	377	391	398	411	403	396	421	426
30948	203	263	311	351	375	399	426	442	466	459	468	486	489
30949	214	256	324	362	398	427	452	461	469	470	484	488	490
30950	201	270	330	378	430	461	495	515	543	552	573	589	593
30951	206	268	318	365	398	432	453	460	481	482	499	508	513
30952	184	244	295	335	370	396	421	439	455	444	479	493	505
30953	185	241	285	319	344	372	401	399	416	410	433	449	448
30954	206	269	320	363	404	438	460	481	496	482	505	509	518
30955	190	251	296	337	376	392	419	436	452	459	478	491	483
30956	208	283	339	389	435	469	504	518	548	540	560	574	582
30957	183	250	299	344	379	403	435	451	475	456	472	482	469
30958	198	243	278	307	331	349	367	379	391	395	407	414	400

TABLE 4. Cont.

## Individual Weekly Male Body Weights

Group Number, Test Article, Dosage Level, Male Number	Study Week												
	0	1	2	3	4	5	6	7	8	9	10	11	12
(7), B0547-01, <u>1000 mg/kg/day:</u>													
30959	177	228	273	307	329	355	377	388	406	404	410	431	439
30960	170	217	274	311	347	372	408	423	402	375	427	451	456
30961	171	220	258	296	330	357	391	406	Died				
30962	176	230	279	328	365	391	424	442	466	469	493	505	511
30963	209	278	349	398	444	476	510	539	565	559	594	616	613
30964	205	248	290	323	355	360	387	389	400	394	416	419	392
30965	206	259	306	343	368	387	411	Died					
30966	180	236	285	326	356	357	377	401	413	403	442	467	474
30967	180	238	285	319	346	355	372	388	395	390	410	420	425
30968	172	226	263	291	327	351	379	396	402	396	417	424	435
30969	205	242	306	350	388	417	433	448	457	454	476	492	487
30970	187	230	275	308	331	348	372	388	384	390	402	408	414
30971	169	215	273	316	319	364	394	415	425	419	445	450	456
30972	198	262	299	342	371	395	426	441	451	434	474	487	486
30973	185	219	253	276	294	314	332	352	364	358	385	397	397
30974	176	240	289	327	350	373	403	430	446	442	459	460	473
30975	176	207	268	301	343	369	402	428	453	450	481	477	496
30976	186	244	295	337	375	411	436	463	487	480	514	526	516
30977	194	234	282	316	339	361	372	394	399	406	432	434	433
30978	194	252	299	345	379	404	429	444	456	457	473	485	483
30979	201	263	325	376	420	469	500	526	530	520	542	546	559
30980	181	243	293	331	360	387	406	429	446	443	465	476	486
30981	213	276	308	353	372	401	421	433	448	442	466	474	468
30982	195	245	305	352	369	Died							
30983	203	238	300	349	382	406	433	455	478	466	501	511	520

TABLE 5.

FEMALES: Summary of Weekly Group Mean Body Weights

Study Week	0 mg/kg/day (Control) (1)						B05A7-01 mg/kg/day (group number)						1000 FD (4)	
	250 FD (2)			500 FD (3)			Mean			Body Weight (g)				
	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Body Weight (g)	Standard Deviation	N		
6	237	14.1	25	239	10.6	25	241	11.6	25	242	12.1	25		
7	249	16.8	25	250	10.5	25	252	15.0	25	248	15.9	25		
8	256	19.1	25	257	13.2	25	259	15.8	25	258	13.0	24		
9 <sup>a</sup>	262	13.1	8	270	13.2	7	263	31.6	11	265	14.8	10		
10	293	17.7	2	297	35.2	3	235	145.0	2	292	7.5	3		
11	294	-	1	309	36.3	3	342	-	1	297	13.4	2		
12	373	-	1	372	91.2	3	373	-	1	348	77.1	2		
13	14	-	1	298	-	1	409	-	1	293	-	1		
			307	-	-	1			296	-	-	1		

a - Matting Initiated  
 N - Number of animals utilized in calculation of means, remaining females either died or had evidence of copulation.

FD - Only females dosed  
 - Not applicable

TABLE 5. Cont.

FEMALES: Summary of Weekly Group Mean Body Weights

B0547-01 mg/kg/day (group number)					
250 <sup>a</sup> (5)			500 <sup>b</sup> (6)		
Study Week	Mean Body Weight (g)	Standard Deviation (+/-)	Mean Body Weight (g)	Standard Deviation (+/-)	Mean Body Weight (g)
6	242	10.4	25	24.1	4.6
7	256	12.9	25	254	15.4
8	267	16.2	25	264	12.2
9 <sup>a</sup>	278	10.2	9	272	14.8
10				307	0.0
11				315	2
12				308	26.9
13				-	2
14				-	1

<sup>a</sup> = Matings Initiated

N = Number of animals utilized in calculation of means, remaining males died

or had evidence of copulation

MD = Only males dosed

- Not applicable

TABLE 6.

Individual Weekly Female Body Weights

Group Number, Test Article, Dosage Level, Female Number	Study Week								
	6	7	8	9	10	11	12	13	14
<u>(1),</u> <u>0 mg/kg/day (Control):</u>									
30984	267	287	304	a					
30985	221	230	239	a					
30986	216	221	231	a					
30987	223	229	240	a					
30988	221	235	238	254	a				
30989	250	263	269	a					
30990	235	250	258	a					
30991	236	251	252	263	a				
30992	251	264	273	280	a				
30993	223	236	245	a					
30994	247	263	276	a					
30995	240	255	266	a					
30996	256	264	277	a					
30997	223	230	234	246	a				
30998	242	245	252	270	305	a			
30999	241	254	274	a					
31000	218	228	233	a					
31001	238	246	234	247	a				
31002	231	252	258	a					
31003	229	236	243	a					
31004	238	250	254	255	280	294	373	b	
31005	221	235	248	a					
31006	253	266	268	277	a				
31007	235	246	250	a					
31008	259	281	290	a					
<u>(2),</u> <u>B0547-01,</u> <u>250 mg/kg/day:</u>									
31009	229	243	255	a					
31010	239	255	255	257	271	296	355	b	
31011	230	242	253	a					
31012	262	272	285	a					
31013	266	278	290	294	337	350	471	b	
31014	239	252	255	a					
31015	232	239	240	Died					
31016	247	258	266	275	a				
31017	228	243	250	a					
31018	244	260	262	268	a				
31019	225	238	245	a					
31020	235	244	248	a					
31021	234	245	261	a					
31022	250	253	273	a					
31023	234	249	260	a					
31024	244	261	265	261	283	281	291	298	307C
31025	228	235	247	a					
31026	248	258	266	275	a				
31027	225	236	245	a					
31028	239	248	269	a					
31029	239	247	243	a					
31030	243	249	249	a					
31031	246	256	238	a					
31032	228	245	251	a					
31033	240	248	245	257	a				

<sup>a</sup>Evidence of mating observed, weekly weights not required<sup>b</sup>No evidence of copulation, dam delivered, see gestation and lactation body weights (Table 8)<sup>c</sup>No evidence of copulation, females sacrificed 25 days following separation from male

TABLE 6. Cont.

## Individual Weekly Female Body Weights

Group Number, Test Article, Dosage Level, Female Number	Study Week						
	6	7	8	9	10	11	12
<u>(3), B0547-01, 500 mg/kg/day:</u>							
31034	222	218	241	178	152	d	
31035	247	260	256	271	a		
31036	253	264	273	a			
31037	240	250	256	a			
31038	251	263	269	282	a		
31039	246	253	268	274	a		
31040	227	235	239	252	a		
31041	233	250	253	254	a		
31042	250	253	266	a			
31043	249	263	269	a			
31044	238	238	234	265	a		
31045	227	240	247	a			
31046	223	229	226	a			
31047	261	277	276	a			
31048	262	286	299	301	337	342	373
31049	239	247	256	a			409
31050	236	247	258	a			b
31051	243	253	258	a			
31052	225	236	244	a			
31053	230	250	261	a			
31054	243	250	252	259	a		
31055	252	263	273	285	a		
31056	234	243	258	a			
31057	252	261	267	271	a		
31058	251	268	278	a			
<u>(4), B0547-01, 1000 mg/kg/day:</u>							
31059	227	221	240	a			
31060	233	218	246	a			
31061	251	253	250	255	a		
31062	243	259	249	a			
31063	246	245	258	249	292	a	
31064	233	261	274	a			
31065	252	259	259	a			
31066	248	257	266	a			
31067	258	256	267	292	a		
31068	251	260	272	261	285	306	402
31069	229	237	240	244	a		b
31070	221	230	234	a			
31071	236	240	253	258	a		
31072	233	222	245	266	300	287	293
31073	225	226	240	267	a		
31074	252	246	255	Died			
31075	246	262	270	a			
31076	222	241	247	a			
31077	252	264	273	272	a		
31078	243	253	260	a			
31079	246	258	267	a			
31080	266	270	278	283	a		
31081	245	267	273	a			
31082	229	233	Died				
31083	255	258	264	a			

<sup>a</sup>Evidence of mating observed, weekly weights not required<sup>b</sup>No evidence of copulation, dam delivered, see gestation and lactation bodyweights (Table 8)<sup>c</sup>No evidence of copulation, female sacrificed 25 days following separation from male<sup>d</sup>Sacrificed in extremis

TABLE 6. Cont.

## Individual Weekly Female Body Weights

Group Number, Test Article, Dosage Level, Female Number	Study Week								
	6	7	8	9	10	11	12	13	14
<b>(5), 80547-01, <u>250 mg/kg/day:</u></b>									
31084	234	249	256	a					
31085	219	251	242	a					
31086	241	251	259	a					
31087	238	252	262	a					
31088	245	266	284	282	a				
31089	248	268	280	a					
31090	250	264	278	a					
31091	256	264	272	284	a				
31092	245	262	289	a					
31093	243	259	263	278	a				
31094	223	236	247	a					
31095	243	265	276	278	a				
31096	236	246	252	261	a				
31097	253	267	280	a					
31098	241	255	273	a					
31099	242	256	267	a					
31100	247	265	268	276	a				
31101	261	281	299	a					
31102	238	254	270	a					
31103	257	278	292	298	a				
31104	241	255	274	280	a				
31105	242	253	247	269	a				
31106	229	233	242	a					
31107	224	235	240	a					
31108	245	258	269	a					
<b>(6), 80547-01, <u>500 mg/kg/day:</u></b>									
31109	231	239	250	a					
31110	244	260	268	282	a				
31111	226	239	235	a					
31112	254	266	271	a					
31113	242	254	263	a					
31114	236	253	264	a					
31115	241	260	271	a					
31116	239	254	258	273	a				
31117	232	242	249	248	a				
31118	240	253	269	a					
31119	229	240	252	a					
31120	242	264	275	a					
31121	232	246	253	a					
31122	250	258	277	a					
31123	252	265	276	277	a				
31124	228	272	258	a					
31125	255	273	283	a					
31126	238	245	260	255	a				
31127	247	263	273	287	307	296	308	363	b
31128	236	240	250	a					
31129	251	273	277	a					
31130	244	249	264	a					
31131	230	204	235	a					
31132	249	264	268	282	307	334	308	363	b
31133	251	272	286	a					

<sup>a</sup>Evidence of mating observed, weekly weights not required<sup>b</sup>No evidence of copulation, dam delivered, see gestation and lactation in body weights  
(Table 8)

TABLE 6. Cont.

## Individual Weekly Female Body Weights

Group Number, Test Article, Dosage Level, Female Number	Study Week								
	6	7	8	9	10	11	12	13	14
<u>(7), 80547-01, 1000 mg/kg/day:</u>									
31134	229	241	249	254	a				
31135	242	252	257	257	a				
31136	236	249	259	258	a				
31137	253	272	274	a					
31138	234	Died							
31139	228	240	247	a					
31140	218	229	236	a					
31141	248	261	275	a					
31142	226	237	248	a					
31143	219	239	254	a					
31144	221	234	250	a					
31145	258	273	285	288	a				
31146	251	262	269	279	a				
31147	255	269	285	289	a				
31148	258	274	291	a					
31149	251	263	280	a					
31150	229	244	260	a					
31151	223	242	249	a					
31152	243	255	267	a					
31153	221	237	252	a					
31154	247	262	290	a					
31155	251	261	280	a					
31156	225	240	252	a					
31157	254	272	291	a					
31158	256	273	263	a					

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<sup>a</sup>Evidence of mating observed, weekly weights not required

TABLE 7. Summary of Group Mean Maternal Body Weights and Body Weight Changes During Gestation and Lactation

		Group Mean Maternal Body Weights (grams)						Group Mean Maternal Body Weights (grams)						
		B65247-01 mg/kg/day (group number)						B65247-01 mg/kg/day (group number)						
0 (Control) (1)		250 <sup>FD</sup> (2)		500 <sup>FD</sup> (3)		1000 <sup>FD</sup> (4)		250 <sup>MD</sup> (5)		500 <sup>MD</sup> (6)		1000 <sup>MD</sup> (7)		
Day of Gestation	Mean + S.D.	Mean + S.D.	Mean + S.D.	Mean + S.D.	Mean + S.D.	Mean + S.D.	Mean + S.D.	Mean + S.D.	Mean + S.D.	Mean + S.D.	Mean + S.D.	Mean + S.D.	Mean + S.D.	
0	267	19.1	265	10.1	265	16.4	259	19.4	276	17.1	270	16.0	271	-17.2
7	297	17.8	294	13.2	296	16.4	288	18.5	306	17.0	303	13.5	301	-19.1
13	321	20.3	317	16.5	316	15.7	309	19.9	329	19.1	323	15.6	324	-20.2
20	392	21.1	388	27.6	389	20.9	384	35.4	393	23.4	394	22.8	393	-25.0
Day of Lactation														
0	304	20.8	305	22.2	316	27.4	299	31.3	304	23.9	307	12.7	310	-16.4
7	326	20.5	323	15.9	326	20.8	319	24.0	324	20.5	329	17.7	324	-14.1
14	348	24.1	343	23.2	344	16.0	339	28.6	342	16.7	351	10.3	341	-18.5
21	326	22.2	330	18.3	331	11.5	336	28.6	331	13.6	328	28.0	329	-14.9
Days of Gestation														
0 to 7	30	6.3	28	6.5	32	10.3	29	10.0	30	7.9	33	7.6	29	-8.4
7 to 13	23	6.7	24	6.3	20	10.0	21	7.5	23	7.5	20	5.1	23	-3.9
13 to 20	72	6.5	73	16.2	76	14.7	73	15.6	70	16.5	73	11.2	65	-17.3
0 to 20	124	9.8	124	20.1	123	19.0	126	25.5	123	22.3	125	15.5	118	-20.1
Days of Lactation														
0 to 7	22	10.8	18	10.0	10	9.9	20	15.6	20	15.3	22	11.8	14	-11.8
7 to 14	22	9.0	20	9.1	18	12.0	20	10.0	17	9.6	23	12.4	18	-12.2
14 to 21	-23	10.6	-13	8.9	-13	10.1	-3	11.8	-10	15.1	-23	25.9	-12	15.3
0 to 21	21	12.3	25	8.0	15	22.7	37	16.3	27	21.4	22	25.4	20	-20.2

<sup>a</sup>Values represent the mean of the individual changes in maternal body weight for these intervals

MD - Only males dosed

FD - Only females dosed

S.D. - Standard deviation

TABLE 8. Individual and Group Mean Maternal Body Weights  
During Gestation and Lactation

Group Number, Test Article, Dosage Level, Dam Number	Actual Body Weight (grams)							
	Day of Gestation				Day of Lactation			
	0	7	13	20	0	7	14	21
<u>( 1 ),</u> <u>0 mg/kg/day (Control):</u>								
30984	305	328	347	a				
30985	250	285	308	384	284	311	332	311
30986	233	266	298	361	286	303	331	325
30987	244	281	308	a				
30988	260	293	320	a				
30989	277	317	345	a				
30990	267	295	321	399	320	342	360	330
30991	262	281	302	373	296	307	324	321
30992	290	324	353	415	333	349	370	337
30993	252	286	298	a				
30994	285	306	330	a				
30995	275	302	327	396	304	340	352	331
30996	290	303	325	396	308	320	350	336
30997	250	283	310	386	279	312	336	297
30998	294	325	347	420	325	366	391	372
30999	282	314	336	a				
31000	241	268	272	a				
31001	257	290	313	a				
31002	268	301	331	a				
31003	247	281	299	376	297	310	336	310
31004	b				299	320	332	310
31005	253	283	302	366	282	311	322	297
31006	273	298	322	a				
31007	264	302	340	a				
31008	292	323	343	426	345	350	394	359
Mean	267	297	321	392	304	326	348	326
+S.D.	19.1	17.8	20.3	21.1	20.8	20.5	24.1	22.2
<u>( 2 ),</u> <u>B0547-01,</u> <u>250 mg/kg/day:</u>								
31009	261	294	307	a				
31010	b				277	306	319	310
31011	269	300	320	a				
31012	282	318	347	432	318	335	352	330
31013	b				336	356	390	361
31014	263	296	322	a				
31015	Old							
31016	275	297	336	a				
31017	264	291	314	350	297	317	322	325
31018	269	311	335	a				
31019	250	271	294	a				
31020	258	278	303	381	285	310	333	316
31021d	263	270	271	a				
31022	283	306	328	a				
31023	269	303	327	414	322	338	367	349
31024	b				c			
31025	257	290	308	a				
31026	273	300	324	412	325	326	357	345
31027	245	272	283	363	278	305	321	303
31028	274	298	322	a				
31029d	264	272	Old gestation day 11		283	311	326	323
31030	257	274	298	367				
31031d	257	284	285	a				
31032	267	299	332	401	330	330	357	347
31033	262	288	310	375	301	315	328	319
Mean	265	294	317	388	305	323	343	330
+S.D.	10.1	13.2	16.5	27.6	22.2	15.9	23.2	18.1

<sup>a</sup>Sacrificed for 13-day uterine examination<sup>b</sup>No evidence of copulation<sup>c</sup>Old not deliver, sacrificed 25 days following termination of mating (nongravid), not included in calculation of mean<sup>d</sup>Nongravid, not included in calculation of mean

TABLE 8. Cont.

Individual and Group Mean Maternal Body Weights  
During Gestation and Lactation

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Group Number, Test Article, Dosage Level, Dam Number		Actual Body Weight (grams)						
		0	7	13	20	0	7	14
(3), 80547-01, <u>500 mg/kg/day:</u>								
31034	Sacrificed							
31035	280	307	319	405	333	336	351	332
31036	271	288	311	359	329	341	345	332
31037	265	287	308	386	302	308	338	330
31038	286	315	323	307	c			
31039	283	319	321	396	316	331	343	324
31040	255	287	317	390	319	336	338	323
31041	270	291	319	a				
31042	272	297	320	399	304	328	360	350
31043d	284	311	316	a				
31044	256	306	338	a				
31045	255	313	305	a				
31046	225	264	291	352				
31047	273	293	316	a				
31048	b							
31049d	250	265	261	a	380	366	368	349
31050	256	290	308	399	308	320	350	318
31051	252	278	295	a				
31052	240	273	297	a				
31053	269	301	322	421	311	319	351	340
31054d	265	285	283	a				
31055	296	334	348	a				
31056	254	293	324	a				
31057	277	308	337	a				
31058	277	302	318	378	302	316	335	326
Mean	263	296	316	389	316	326	344	331
+S.D.	16.4	16.4	15.7	20.9	27.4	20.8	16.0	11.
(4), 80547-01, <u>1000 mg/kg/day:</u>								
31059	236	271	283	a				
31060*	252	Died						
31061	263	280	290	332	265	288	294	313
31062	270	303	319	a				
31063	280	303	328	a				
31064	258	291	288	a				
31065	244	270	287	a				
31066d	261	266	274	a				
31067	288	333	340	440	376	368	399	395
31068	b							
31069	249	269	288	a	284	332	344	350
31070	228	267	290	355	278	313	323	323
31071	267	295	313	a	280	297	311	290
31072	b			t				
31073	262	285	311	a				
31074	Died							
31075	259	281	303	376	294	297	333	317
31076	241	275	299	a				
31077	280	311	338	a				
31078	224	269	297	a				
31079	270	277	304	367	297	311	333	334
31080	293	314	345	a				
31081	247	288	314	432	324	342	359	358
31082	Died			387	292	315	340	339
31083	267	301	330	400	298	324	353	337
Mean	259	288	309	384	299	319	339	336
+S.D.	19.4	18.5	19.9	35.4	31.3	24.0	28.6	28.6

\*Sacrificed for 13-day uterine examination  
bNo evidence of copulation

cDid not deliver, sacrificed 25 days following termination of mating (nongravid), not included in calculation of mean

dNongravid, not included in calculation of mean

eDam died gestation day 3, pregnancy status unknown, not included in calculation of mean

fDid not deliver, sacrificed 25 days following termination of mating (gravid), not included in calculation of mean

191-900 S.D. - Standard deviation

TABLE 8. Cont.

Individual and Group Mean Maternal Body Weights  
During Gestation and Lactation

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Group Number, Test Article, Dosage Level, Dam Number	Actual Body Weight (grams)				Day of Lactation		
	0	7	13	20	0	7	14
<u>(5), 80547-01, 250 mg/kg/day:</u>							
31084	267	303	317	a			
31085	250	277	302	367	276	305	322
31086	250	290	315	371	310	320	346
31087	269	302	322	a			342
31088	285	306	341	a			
31089	288	304	326	a			
31090	279	315	341	a			
31091	286	316	331	a			
31092	293	320	347	430	339	352	366
31093	282	314	334	a			366
31094	245	274	300	377	270	304	322
31095	282	302	315	a			329
31096	266	281	312	383	287	301	330
31097	280	310	335	a			334
31098	269	311	334	a			
31099d	270	314	311	a			
31100	283	315	340	396	337	348	350
31101	305	322	329	370	326	340	360
31102	276	307	322	425	304	355	361
31103	309	349	383	a			326
31104	293	321	360	422	313	312	332
31105	272	307	328	399	305	314	314
31106	243	280	300	380	280	315	346
31107	245	255	263	263	c	322	322
31108	277	304	327	a			327
Mean	276	306	329	393	304	324	342
<u>±S.D.</u>	17.1	17.0	19.1	23.4	23.9	20.5	16.7
<u>(6), 80547-01, 500 mg/kg/day:</u>							
31109	248	285	301	a			
31110d	290	325	335	a			
31111	255	291	304	a			
31112	282	308	321	a			
31113	264	301	326	a			
31114	278	306	325	408	314	365	363
31115	274	303	323	406	308	329	356
31116	276	315	340	a			362
31117	254	286	300	358	288	306	327
31118d	272	300	325	a			316
31119d	258	285	291	a			
31120	277	316	331	400	315	320	344
31121	250	297	307	378	302	322	320
31122	271	302	328	a			335
31123	290	308	333	402	319	330	330
31124	263	306	323	399	295	314	356
31125	301	332	353	437	327	353	350
31126	254	295	311	a			247
31127	b						363
31128	260	290	307	359	315	340	342
31129	294	313	333	a	291	311	317
31130	265	290	314	386	296	310	344
31131	247	286	312	400	295	334	338
31132	b				320	342	353
31133	293	332	357	a			344
Mean	270	303	323	394	307	329	351
<u>±S.D.</u>	16.0	13.5	15.6	22.8	12.7	17.7	10.3
							28.0

aSacrificed for 13-day uterine examination

bNo evidence of copulation

cDid not deliver, sacrificed 25 days following termination of mating (nongravid), not included in calculation of mean

dNongravid, not included in calculation of mean

TABLE 8. Cont.

Individual and Group Mean Maternal Body Weights  
During Gestation and Lactation

Group Number, Test Article, Dosage Level, Dam Number	Day of Gestation			Actual Body Weight (grams)			Day of Lactation		
	0	7	13	20	0	7	14	21	
(7), B0547-01, <u>1000 mg/kg/day:</u>									
31134	263	281	304	367	296	315	325	316	
31135	271	301	323	a					
31136	276	279	303	a					
31137	280	312	330	a					
31138	Dled								
31139	250	292	320	a					
31140	257	259	280	a					
31141	280	314	335	403	299	321	363	337	
31142	248	281	308	a					
31143	262	288	304	389	294	304	327	338	
31144	254	296	317	406	300	315	340	306	
31145	297	334	363	a					
31146	286	314	342	400	331	328	353	346	
31147	288	313	339	398	293	332	339	342	
31148	291	322	349	430	319	343	374	340	
31149	283	311	333	404	307	322	340	329	
31150	264	305	327	378	329	330	343	312	
31151	253	275	298	a					
31152	268	300	322	a					
31153	254	282	308	347	292	297	303	310	
31154	293	327	349	428	340	342	336	329	
31155	286	314	329	365	315	333	352	348	
31156	254	283	304	a					
31157	293	316	341	a					
31158	284	319	349	a					
Mean	271	301	324	393	310	324	341	329	
+S.D.	17.2	19.1	20.2	25.0	16.8	14.1	18.5	14.9	

<sup>a</sup>Sacrificed for 13-day uterine examination  
S.D. - Standard deviation

TABLE 9.  
Summary of Group Mean Maternal and Fetal Observations at 13-Day Uterine Examination

	B0547-01 mg/kg/day (group number)								
	No.	0 (Control) (1)	No.	250FD (2)	No.	500FD (3)	No.	1000FD (4)	
		No.	S.D.	No.	S.D.	No.	S.D.	No.	S.D.
<b>Animals scheduled for uterine examination:</b>	12	-	-	11	-	12	-	11	-
<b>Animals that were gravid:</b>	12	-	-	9	-	9	-	10	-
<b>Animals examined at uterine examination:</b>	12	-	-	11	-	12	-	11	-
<b>Nongravid:</b>	0	-	-	2	-	3	-	1	-
<b>Gravid:</b>	12	-	-	9	-	9	-	10	-
Dams with resorptions only:	0	-	-	0	-	0	-	0	-
Dams with viable embryos:	12	-	-	9	-	9	-	0	-
Viable embryos/dam:	13.5	-	3.32	13.9	-	14.1	-	10	-
Postimplantation loss/dam:	0.8	-	0.75	1.2	-	1.18	0.3	2.62	0.32
Total implantations/dam:	14.3	-	3.57	15.1	-	14.4	-	0.50	0.79
Corpora lutea/dam:	16.1	-	3.03	16.6	-	14.5	-	2.19	14.4
Group mean preimplantation loss (%) <sup>a</sup> :	-	11.4	-	8.7	-	15.3	-	2.35	15.7
Group mean postimplantation loss (%) <sup>b</sup> :	-	5.3	-	8.1	-	5.8	-	0.3	2.06
						2.3	-	5.6	-

Values from the treated groups, specified to be tested in the report, did not differ significantly from the control group; p>0.05.

<sup>a</sup>Total No. Corpora Lutea - Total No. Implantations  $\times$  100 = Group mean preimplantation loss (%)

<sup>b</sup>Total No. Implantations - Total No. Viable Fetuses

Total No. Implantations  $\times$  100 = Group mean postimplantation loss (%)

FD = Only females dosed

S.D. = Standard deviation

- Not applicable

TABLE 9. Cont.  
Summary of Group Mean Maternal and Fetal Observations at 15-Day Uterine Examination

	80547-01 mg/kg/day (group number)		
	No.	250 <sup>a</sup> (5)	MD (5) +S.D.
Animals scheduled for uterine examination:	13	-	-
Animals that were gravid:	12	-	-
Animals examined at uterine examination:	13	-	-
Nongravid:	1	-	-
Gravid:	12	-	-
Dams with resorptions only:	0	-	-
Dams with viable embryos:	12	-	-
Viable embryos/dam:	14.4	-	-
Postimplantation loss/dam:	0.7	-	-
Total implantations/dam:	15.1	-	-
Corpora lutea/dam:	16.4	-	-
Group mean preimplantation loss (\$) <sup>b</sup> :	-	8.1	-
Group mean postimplantation loss (\$):	-	4.4	-
	No.	500 <sup>c</sup> (6)	MD (6) +S.D.
Animals scheduled for uterine examination:	12	-	-
Animals that were gravid:	10	-	-
Animals examined at uterine examination:	12	-	-
Nongravid:	2	-	-
Gravid:	10	-	-
Dams with resorptions only:	0	-	-
Dams with viable embryos:	10	-	-
Viable embryos/dam:	13.7	-	-
Postimplantation loss/dam:	3.20	-	-
Total implantations/dam:	0.6	-	-
Corpora lutea/dam:	14.3	-	-
Group mean preimplantation loss (\$):	15.8	-	-
Group mean postimplantation loss (\$):	-	9.5	-
	No.	1000 <sup>d</sup> (7)	MD (7) +S.D.
Animals scheduled for uterine examination:	12	-	-
Animals that were gravid:	12	-	-
Animals examined at uterine examination:	12	-	-
Nongravid:	0	-	-
Gravid:	12	-	-
Dams with resorptions only:	0	-	-
Dams with viable embryos:	12	-	-
Viable embryos/dam:	13.6	-	-
Postimplantation loss/dam:	3.87	-	-
Total implantations/dam:	1.51	-	-
Corpora lutea/dam:	1.51	-	-
Group mean preimplantation loss (\$):	15.1	-	-
Group mean postimplantation loss (\$):	2.61	-	-

<sup>a</sup>Total No. Corpora Lutea - Total No. Implantations  $\times 100 =$  Group mean preimplantation loss (\$)

<sup>b</sup>Total No. Implantations - Total No. Corpora Lutea

<sup>c</sup>Total No. Implantations - Total No. Viable Fetuses  $\times 100 =$  Group mean postimplantation loss (\$)

<sup>d</sup>Only males dosed

S.D. = Standard deviation

- Not applicable

TABLE 10. Individual and Group Mean Maternal Observations at 13-Day Uterine Examination

Group Number, Dosage Level, Dam Number	First Male Used	Second Male Used	Viable Embryos	Nonviable Embryos	Early Resorptions	Post- implantation Loss	Total Implantations	Corpora Lutea
<u>(1), 0 mg/kg/day (Control):</u>								
30984	30809	-	16	0	2	18	20	
30987	30812	-	12	0	1	13	14	
30988	30813	-	14	0	1	15	15	
30989	30814	-	18	0	0	18	21	
30993	30818	-	15	0	1	16	17	
30994	30819	-	14	0	2	16	19	
30999	30824	-	12	0	1	13	13	
31000	30825	-	15	0	1	16	17	
31001	30826	-	6	0	0	6	13	
31002	30827	-	15	0	0	15	17	
31006	30831	-	9	0	0	9	11	
31007	30832	-	16	0	0	16	16	
<b>Total</b>	-	-	<b>162</b>	<b>0</b>	<b>9</b>	<b>171</b>	<b>193</b>	
<b>Mean</b>	-	-	<b>13.5</b>	<b>0.0</b>	<b>0.8</b>	<b>14.3</b>	<b>16.1</b>	
<b><u>±S.D.</u></b>	-	-	<b>3.32</b>	<b>0.00</b>	<b>0.75</b>	<b>3.57</b>	<b>3.03</b>	

S.D. - Standard deviation  
- Not applicable

TABLE 10. Cont. Individual and Group Mean Maternal Observations at 13-Day Uterine Examination

Group Number, Test Article, Dosage Level, Dam Number	First Male Used	Second Male Used	Viable Embryos	Nonviable Embryos	Early Resorptions	Post- implantation Loss	Total Implantations	Corpora lutea
(2), B0547-01,								
250 mg/kg/day:								
31009	-	12	0	4	4	16	17	
31011	30836	-	14	0	0	14	15	
31014	30839	-	14	0	1	15	15	
31016	30841	-	12	0	0	12	15	
31018	30843	-	16	0	0	16	20	
31019	30844	-	16	0	0	16	17	
31021	30846	-	Nongravid	0	3	3	19	
31022	30847	-	14	0	1	1	15	
31025	30850	-	14	0	2	2	15	
31028	30853	-	13	0			16	
31031	30856	-	Nongravid					
Total	-	-	125	0	11	11	136	149
Mean	-	-	13.9	0.0	1.2	1.2	15.1	16.6
+S.D.	-	-	1.45	0.00	1.48	1.48	1.45	1.88

S.D. - Standard deviation  
- Not applicable

TABLE 10. Cont. Individual and Group Mean Maternal Observations at 13-Day Uterine Examination

Group Number, Test Article, Dosage Level, Dam Number	First Male Used	Second Male Used	Viable Embryos	Nonviable Embryos	Early Resorptions	Post- implantation Loss	Total Implantations	Total Corpora Lutea
(3), B0547-01, <u>500 mg/kg/day:</u>								
31041								
31043	30866	-	15	0	0	0	15	16
31044	30868	-	16	0	0	0	16	16
31045	30869	-	15	0	0	0	15	15
31047	30870	-	15	0	1	1	12	13
31049	30872	-	11	0	0	0	12	12
31051	30874	-	12	0	0	0	17	17
31052	30876	-	16	0	1	1	17	17
31054	30877	-	16	0	1	1	17	17
31055	30879	-	10	0	0	0	10	10
31056	30880	-	18	0	1	1	19	20
31057	30881	-	18	0	0	0	14	14
	30882	-	14	0	0	0	14	14
Total								
Mean	-	-	12.7	0	3	3	13.0	13.8
<u>±S.D.</u>	-	-	14.1	0.0	0.3	0.3	14.4	15.3
			2.62	0.00	0.50	0.50	2.79	2.35

S.D. - Standard deviation  
- Not applicable

TABLE 10. Cont. Individual and Group Mean Maternal Observations at 13-Day Uterine Examination

Group Number, Test Article, Dosage Level, Dam Number	First Male Used	Second Male Used	Viable Embryos	Nonviable Embryos	Early Resorptions	Post- implantation Loss	Total Implantations	Corpora Lutea
<b>(4), B0547-01,</b>								
<b>1000 mg/kg/day:</b>								
31059	30884	-	14	0	1	1	15	15
31062	30887	-	14	0	1	1	15	19
31063	30888	30884	14	0	2	2	16	16
31064	30889	-	13	0	0	0	13	14
31065	30890	-	13	0	0	0	13	13
31066	30891	-	Nongravid	0	0	0	0	0
31071	30896	-	13	0	0	0	13	13
31073	30898	-	14	0	0	0	13	19
31076	30901	-	14	0	1	0	14	14
31077	30902	-	14	0	2	2	15	15
31079	30904	-	13	0	1	1	16	17
Total	-	-	136	0	8	8	144	157
Mean	-	-	13.6	0.0	0.8	0.8	14.4	15.7
+S.D.	-	-	0.52	0.00	0.79	0.79	1.17	2.06

S.D. - Standard deviation

- Not applicable

TABLE 10. Cont. Individual and Group Mean Maternal Observations at 13-Day Uterine Examination

Group Number, Test Article, Dosage Level, Dam Number	Firat Male Used	Second Male Used	Embryos Viable Nonviable	Early Resorptions	Post- implantation Loss	Total Implantations	Corpora Lutea
<b>(5)</b>							
B0547-01,							
<u>250 mg/kg/day:</u>							
31084	30909	-	13	0	1	14	18
31087	30912	-	13	0	2	15	15
31088	30913	-	15	0	0	15	15
31089	30914	-	16	0	0	16	18
31090	30915	-	15	0	2	2	17
31091	30916	-	16	0	0	0	17
31093	30918	-	16	0	0	16	16
31095	30920	-	7	0	1	17	18
31097	30922	-	14	0	0	7	15
31098	30923	-	15	0	0	0	14
31099	30924	-	0	1	1	16	14
31103	30928	-	19	0	0	0	17
31108	30933	-	14	0	0	0	19
Total	-	-	173	0	8	181	197
Mean	-	-	14.4	0.0	0.7	15.1	16.4
<u>±S.D.</u>	-	-	2.84	0.00	0.78	2.91	1.62

S.D. - Standard deviation  
- Not applicable

TABLE 10. Cont. Individual and Group Mean Maternal Observations at 13-Day Uterine Examination

Group Number, Test Article, Dosage Level, Dau Number	First Male Used	Second Male Used	Embryos Viable Nonviable	Early Resorptions	Post- implantation Loss	Total Implantations	Corpora Lutea
(6), B0547-01,							
500 mg/kg/day:							
31109	30934	-	11	0	1	1	12
31110	30935	-	Nongravid	0	0	0	14
31111	30936	-	14	0	0	0	17
31112	30937	-	17	0	0	0	17
31113	30938	-	14	0	0	0	14
31114	30941	-	15	0	0	0	15
31115	30943	-	15	0	1	1	16
31116	30944	-	Nongravid	0	0	0	17
31117	30947	-	17	0	0	0	17
31118	30951	-	14	0	3	3	17
31119	30954	-	14	0	1	1	15
31122	30958	-	6	0	0	0	6
Total	-	-	137	0	6	6	158
Mean	-	-	13.7	0.0	0.6	0.6	15.8
<u><math>\pm S.D.</math></u>	-	-	3.20	0.00	1.00	1.00	3.33

S.D. = Standard deviation  
- Not applicable

TABLE 10. Cont. Individual and Group Mean Maternal Observations at 13-Day Uterine Examination

Group Number, Test Article, Dosage Level, Dam Number	First Male Used	Second Male Used	Embryos	Early Resorptions	Post- implantation Loss	Total Implantations	Corpora Lutea
	Viable	Nonviable					
(7),							
B0547-01,							
1000 mg/kg/day:							
31135	30960	-	9	0	1	10	15
31136	30962	-	8	0	5	13	14
31137	30962	-	17	0	0	17	17
31139	30964	-	15	0	3	3	18
31140	30963	-	12	0	0	0	18
31142	30967	-	15	0	2	12	12
31145	30970	-	17	0	2	17	17
31151	30976	-	15	0	0	0	17
31152	30977	-	12	0	1	1	17
31156	30981	-	15	0	1	1	17
31157	30964	-	15	0	1	1	13
31158	30983	-	13	0	3	3	16
Total	-	-	163	0	18	1.51	19
Mean	-	-	13.6	0.0	1.5	15.1	14
<u><sup>±</sup>S.D.</u>	-	-	2.87	0.00	1.51	2.61	189
							189
							2.14

S.D. - Standard deviation  
- Not applicable

TABLE II.  
F<sub>0</sub> Summary of Gestation and Lactation Data

Group Number, Test Article, Dosage Level, (mg/kg/day)	Fertility/Pregnancy Indices <sup>a</sup>			Mean Gestation Length (days ±S.D.)	Mean No. Dead Pups at Day 0 (±S.D.)	Mean No. Live Pups at Day 0 (±S.D.)
	Gravid Females	Fertility Rates	Total Rates			
Mated	%	%	%			
(1), 0 (control)	23/25	100.0	24/25	96.0	21.8	0.58
(2), B0547-01, 250	20/24	83.3	20/24	83.3	21.4	0.53
(3), B0547-01, 500	20/24	83.3	19/24	79.2	21.8	0.42
(4), B0547-01, 1000	21/22	95.5	20/21	95.2	22.1	0.60
(5), B0547-01, 250	23/25	92.0	23/25	92.0	22.0	0.45
(6), B0547-01, 500	23/25	92.0	22/25	88.0	21.9	0.30
(7), B0547-01, 1000	24/24	100.0	22/22	100.0	21.9	0.79
					0.1	0.29
					12.2	3.83
					13.6	1.66

<sup>a</sup>Fertility and pregnancy indices include animals scheduled to deliver and the animals scheduled for day 13 uterine examination  
For only females dosed  
MO Only males dosed  
191-900

TABLE II. Cont.

F<sub>0</sub> Summary of Gestation and Lactation Data

Group Number, Test Article, Dosage Level, (mg/kg/day)	Pup Survival Index (Lactation Days)									
	No. Live Pups at Day 0	No. Live Pups at Day 4 B.R.	No. Live Pups at Day 7	No. Live Pups at Day 14	No. Live Pups at Day 21	No. Live Pups at Day 0	No. Live Pups at Day 4 A.R.	No. Live Pups at Day 7	No. Live Pups at Day 14	No. Live Pups at Day 21
(1), 0 (Control)	177/177	100.0	174/177	98.3	130/130	100.0	130/130	100.0	130/130	100.0
(2), B0547-01, 250FD	144/146	98.6	140/144	97.2	105/105	100.0	105/105	100.0	105/105	100.0
(3), B0547-01, 500FD	145/147	98.6	139/145	95.8	104/104	100.0	104/104	100.0	104/104	100.0
(4), B0547-01, 1000FD	123/126	97.6	119/123	96.7	99/99	100.0	99/99	100.0	99/99	100.0
(5), B0547-01, 250FD	145/148	98.0	141/145	97.2	103/104	99.0	103/103	100.0	103/103	100.0
(6), B0547-01, 500FD	182/185	98.4	179/182	98.4	130/130	100.0	130/130	100.0	130/130	100.0
(7), B0547-01, 1000FD	146/147	99.3	144/146	98.6	106/106	100.0	106/106	100.0	106/106	100.0

B.R. = Before Reduction  
A.R. = After Reduction  
FD Only females dosed  
M0 Only males dosed

TABLE 11. Cont.

 $F_0$  Summary of Gestation and Lactation Data

Group Number, Test Article, Dosage Level, (mg/kg/day)	Group Mean Body Weight (grams) of Live Pups During Lactation (Lactation Days)											
	0		4 B.R.		7 A.R.		7		14		21	
	Mean	$\pm S.D.$	Mean	$\pm S.D.$	Mean	$\pm S.D.$	Mean	$\pm S.D.$	Mean	$\pm S.D.$	Mean	$\pm S.D.$
(1), Control	6.0	0.62	9.6	1.33	9.6	1.28	14.7	1.84	29.9	2.50	49.4	4.47
(2), B05 <sup>4</sup> D-01, 250	6.0	0.55	9.4	1.24	9.4	1.26	14.7	1.15	29.8	1.04	49.4	2.92
(3), B05 <sup>4</sup> D-01, 500	6.0	0.42	9.5	1.33	9.5	1.36	14.9	1.95	29.5	2.80	49.0	4.92
(4), B05 <sup>4</sup> D-01, 1000	5.9	0.41	9.3	0.51	9.3	0.55	13.8	0.73	27.5*	1.88	46.4	2.77
(5), B05 <sup>4</sup> D-01, 250	6.3	0.50	10.0	1.03	10.0	0.99	15.6	1.15	31.0	2.09	50.6	2.93
(6), B05 <sup>4</sup> D-01, 500	6.1	0.34	9.3	0.73	9.4	0.71	14.7	1.03	29.8	2.14	50.5	2.91
(7), B05 <sup>4</sup> D-01, 1000	6.5	0.75	10.2	1.90	10.3	1.86	15.9	2.37	32.0	3.96	53.1	5.82
											51.0*	6.00

B.R. - Before reduction  
A.R. - After reduction  
FD - Only females dosed  
MD - Only males dosed  
\*Significantly different from control group;  $p < 0.05$

TABLE 12.

Group Number, Test Article, Dosage Level, Dam Number	First Male Used	Second Male Used	Ges- tation Length (Days)	No. Pups Dead on Day 0	F <sub>1</sub> Individual Litter Data					
					Number Live Pups on Lactation Day			Mean Weight (grams) of Live Pups on Lactation Day		
					0	4	7	14	7	21
<b>(1), 0 mg/kg/day (Control):</b>										
30985	30810	-	22	0	14	10	10	5	5.9	9.6
30986	30811	-	22	0	11	10	10	5	6.2	10.4
30990	30815	-	21	0	15	10	10	5	5.2	8.1
30991	30816	-	21	0	14	13	10	4	5.4	8.3
30992	30817	-	23	0	11	11	10	5	7.2	12.9
30995	30820	-	22	0	13	13	10	5	7.2	12.5
30996	30821	-	22	0	14	14	10	4	6.8	12.7
30997	30822	-	22	0	14	14	10	4	6.8	19.1
30998	30823	30809	22	0	16	16	10	5	5.8	9.8
31003	30828	-	22	0	16	16	10	5	5.9	9.3
31004	30829 <sup>a</sup>	30810	21	0	15	14	10	5	5.6	8.7
31005	30830	<sup>b</sup>	0	12	11	10	10	5	8.5	12.8
31008	30833	-	22	0	13	13	10	4	5.5	8.1
Total	-	-	22	0	13	13	10	5	6.8	13.0
Mean	-	-	-	-	177	174	130	130	130	130
+S.D.	-	-	-	-	21.8	0.0	13.6	13.4	10.0	10.0
(2), 250 mg/kg/day:	-	-	-	-	0.28	0.00	1.66	1.71	0.00	0.00
31010	30835 <sup>a</sup>	30834	22	0	1	9	9	9	6	10.7
31012	30837	-	17	1	15	10	10	5	5	6.0
31013	30838 <sup>a</sup>	30836	22	0	16	16	10	10	4	6.0
31015	-	0 <sup>ed</sup>	-	-	10	10	10	6	4	8.7
31017	30842	-	22	0	6	6	6	5	5	6.0
31020	30845	-	21	0	14	14	10	5	1	7.1
31023	30848	-	21	0	13	13	10	5	5	5.9
31024	30849	30837	Old not deliver	13	10	10	10	5	5	8.6
31026	30851	-	21	0	16	16	10	10	5	6.1
31027	30852	-	22	0	14	14	10	10	5	8.4
31029	30854	-	0 <sup>ed</sup> - non gravid	14	10	10	10	5	5	8.1
31030	30855	-	22	0	12	12	10	10	5	5.6
31032	30857	-	21	0	13	13	10	10	4	6.6
31033	30858	-	21	0	15	12	10	10	5	5.5
Total	-	-	-	-	2	144	140	105	105	105
Mean	-	-	-	-	21.4	0.2	13.1	12.7	9.5	9.5
+S.D.	-	-	-	-	0.53	0.40	3.18	3.00	1.21	1.21

<sup>a</sup>Pregnancy attributed to this male  
<sup>b</sup>No evidence of copulation

S.D. - Standard deviation  
- Not applicable

TABLE 12. Cont.

Group Number, Test Article, Dosage Level, Dam Number	First Male Used	Second Male Used	Ges- tation Length (Days)	No. Pups Dead on Day 0	F <sub>1</sub> Individual Litter Data				Mean Weight (grams) of Live Pups on Lactation Day 0	Reduction Before After	Male Female	Male Female				
					Number Live Pups on Lactation Day		Reduction Before After	Reduction Before After								
					0	4										
<b>(3), B0547-01, 500 mg/kg/day:</b>																
31034	30859	30860	Sacrificed	2	13	10	10	5	6.0	9.9	16.1	31.1				
31035	30860	-	21	0	4	4	4	2	6.7	12.5	18.7	52.9				
31036	30861	-	22	0	16	10	10	4	5.9	7.6	12.0	55.7				
31037	30862	-	22	0	14	10	10	4	6	5.9	7.5	22.1				
31038	30863	-	Did not deliver	0	13	10	10	5	6.2	9.4	15.0	40.2				
31039	30864	-	22	0	14	10	10	5	6.1	9.6	15.8	45.6				
31040	30865	-	22	0	13	10	10	5	5.9	9.8	15.8	47.4				
31042	30867	-	22	0	14	10	10	5	5.7	8.6	13.2	43.7				
31046	30871	-	22	0	13	10	10	4	6	8.6	13.4	42.4				
31048	30873	-	22	0	15	10	10	5	5.9	10.6	16.8	43.9				
31050	30875	b	22	0	13	12	10	4	5	5.7	8.6	28.2				
31053	30876	-	21	0	15	13	10	4	6	5.1	8.6	13.4				
31058	30883	-	22	0	17	17	10	10	5	5.9	10.7	16.8				
<b>Total</b>	-	-	-	2	145	139	104	104	104	6.4	9.5	13.2				
<b>Mean</b>	-	-	-	21.8	0.2	13.2	12.6	9.5	9.5	-	-	45.8				
<b><math>\pm S.D.</math></b>	-	-	-	0.42	0.60	3.40	3.17	1.81	1.81	0.42	1.33	45.2				
<b>(4), B0547-01, 1000 mg/kg/day:</b>																
31060	30885	-	Died	23	0	10	10	7	6.2	9.6	14.0	27.5				
31061	30886	-	22	0	13	10	10	5	6.4	9.5	14.4	44.6				
31067	30892	-	b	0	16	15	10	5	5.5	8.2	13.4	45.4				
31068	30893a	b	22	0	13	10	10	5	5.4	9.1	9.0	29.2				
31069	30894	-	22	0	13	10	10	5	5	5.4	9.0	13.2				
31070	30895	-	22	1	11	9	9	5	4	5.7	9.2	12.7				
31072	30896	Did not deliver (gravid)	-	22	0	13	10	5	5	5	5	25.4				
31074	-	Died	-	22	0	12	10	5	6.2	9.6	14.7	41.6				
31075	30900	-	21	0	10	10	10	5	5	5	10.1	27.9				
31078	30903	-	21	0	10	10	10	4	6	5.5	9.0	13.6				
31080	30905	-	22	1	14	13	10	5	5	6.3	9.7	15.1				
31081	30906	-	22	0	13	10	10	5	5	5.7	9.1	13.7				
31082	-	Died	-	23	1	11	10	4	6	6.4	9.7	13.4				
31083	30908	-	-	3	123	99	99	99	-	-	-	-				
<b>Total</b>	-	-	-	22.1	0.3	12.3	11.9	9.9	9.9	5.9	9.3	13.8				
<b>Mean</b>	-	-	-	0.60	0.48	1.89	1.85	0.32	0.32	0.41	0.51	45.0				
<b><math>\pm S.D.</math></b>	-	-	-	0.60	0.48	1.89	1.85	0.32	0.32	0.41	0.51	45.0				
<b>Significantly different from control; <math>p &lt; 0.05</math></b>																
<b>aPregnancy attributed to this male</b>																
<b>bNo evidence of copulation</b>																
<b>S.D. - Standard deviation</b>																
<b>- Not applicable</b>																

\*Significantly different from control;  $p < 0.05$

aPregnancy attributed to this male

bNo evidence of copulation

TABLE 12. Cont.

Group Number, Test Article, Dosage Level, Dose Number	First Male Used	Second Male Used	Ges- tation Length (Days)	No. Pups Dead on Day 0	Number Live Pups on Lactation Day				Mean Weight (grams) of Live Pups on Lactation Day			
					0		7		14		21	
					Reduction Before	After	Reduction Before	After	Reduction Before	After	Reduction Before	After
<b>(5), 250 mg/kg/day:</b>												
31085	30910	-	22	1	13	12	10	10	5	5	10.0	10.1
31086	30911	-	22	0	14	14	10	10	6.4	10.7	15.6	48.6
31092	30917	-	22	0	13	13	10	10	5	5	10.2	10.2
31094	30919	-	22	0	14	14	10	10	5	5	10.2	10.2
31096	30921	-	22	0	14	14	10	10	5	5	10.2	10.2
31100	30925	-	21	0	14	14	10	10	5	5	10.7	10.7
31101	30926	-	22	0	12	10	10	10	5	5	10.2	10.2
31102	30927	-	22	0	5	5	5	5	5	5	10.1	10.1
31104	30929	-	22	0	16	16	10	10	5	5	12.3	12.3
31105	30930	-	23	0	17	17	10	10	5	5	12.3	12.3
31106	30931	-	22	1	15	15	10	10	5	5	12.3	12.3
31107	30932	-	22	1	17	16	10	9	1	8	12.3	12.3
Did not deliver				-	17	16	10	10	5	5	12.3	12.3
Total	-	-	-	-	3	145	141	104	103	103	-	-
Mean	-	-	-	-	22.0	0.3	13.2	12.8	9.5	9.4	6.3	10.0
<u>S.D.</u>	-	-	-	-	0.45	0.47	3.57	3.43	1.51	1.50	1.50	0.50
<b>(6), 80547-01, 500 mg/kg/day:</b>												
31114	30939	-	22	0	14	14	10	10	5	5	9.6	9.5
31115	30940	-	22	2	12	12	10	10	5	5	10.8	10.9
31117	30942	-	22	0	11	11	10	10	5	5	9.4	9.4
31120	30945	-	21	0	15	15	10	10	5	5	8.2	8.2
31121	30946	-	22	0	13	13	10	10	5	5	8.2	8.2
31123	30948	-	22	0	14	14	10	10	5	5	8.2	8.2
31124	30949	-	22	0	14	12	10	10	5	5	8.7	8.7
31125	30950	-	22	0	16	16	10	10	5	5	8.9	8.9
31127	30952	b	22	0	17	17	10	10	5	5	8.6	8.6
31128	30953	b	22	1	15	15	10	10	5	5	8.1	8.1
31130	30955	-	22	0	11	11	10	10	5	5	9.3	9.3
31131	30956	-	22	0	14	14	10	10	5	5	9.2	9.2
31132	30957	a	22	0	16	16	10	10	5	5	9.9	9.9
Total	-	-	-	-	3	182	179	130	130	130	-	-
Mean	-	-	-	-	21.9	0.2	14.0	13.8	10.0	10.0	6.1	9.3
<u>S.D.</u>	-	-	-	-	0.30	0.60	1.87	1.96	0.00	0.00	0.00	0.34

aPregnancy attributed to this male

bNo evidence of copulation

- Not applicable

TABLE 12. Cont.

Group Number	Test Article	First Male Used	Second Male Used	Ges- tation Length (Days)	No. Pups Dead on Day 0	Number Live Pups on Lactation Day		Mean Weight (grams) of Live Pups on Lactation Day	
						4		7	
						Reduction Before	After	Male	Female
<b>(7)</b> <b>B0347-01,</b> <b>1000 mg/kg/day:</b>									
31134	-	30959	-	21	0	15	15	10	10
31138	-	-	Died	22	0	15	15	10	10
31141	10966	-	-	21	0	15	15	10	10
31143	30968	-	-	21	0	15	15	10	10
31144	30969	-	-	21	0	15	15	10	10
31146	30971	-	-	21	0	15	15	10	10
31147	30972	-	-	23	0	15	15	10	10
31148	30973	-	-	23	0	14	14	10	10
31149	30974	-	-	22	-1	13	10	10	10
31150	30975	-	-	23	0	6	6	3	3
31153	30978	-	-	22	0	5	5	1	4
31154	30979	-	-	22	0	13	10	5	5
31155	30980	-	-	22	0	7	5	2	3
<b>Total</b>		-	-	1	146	144	106	106	106
<b>Mean</b>		-	-	21.9	0.1	12.2	12.0	8.8	8.8
<b>S.D.</b>		-	-	0.79	0.29	3.83	4.11	2.12	2.12

*Croody valent* does not represent total number of buds

\*stat|st|cal|x different from control: 0.00-0.05

• 5

TABLE 13. Summary of Group Mean Maternal Uterine Observations at Weaning

Group Number, Test Article, Dosage Level, (mg/kg/day)	No. of Implantation Sites		No. of Pups Delivered		No. of Remaining Sites <sup>a</sup>	
	Mean	(+/-)S.D.	Mean	(+/-)S.D.	Mean	(+/-)S.D.
(1), 0 (Control)	15.0	1.29	13.6	1.66	1.4	1.45
(2), B0547-01, 250FD	14.0	3.46	13.3	3.20	0.7	1.01
(3), B0547-01, 500FD	14.3	3.61	13.4	3.44	0.9	1.04
(4), B0547-01, 1000FD	12.5	4.34	11.5	4.20	1.0	1.26
(5), B0547-01, 250MD	14.5	3.36	13.5	3.75	1.1	0.94
(6), B0547-01, 500MD	15.5	1.61	14.2	1.64	1.2	1.17
(7), B0547-01, 1000MD	12.5	4.27	12.3	3.86	0.5	0.69

<sup>a</sup> = implantation sites not corresponding to delivered pups; values represent postimplantation loss and/or complete cannibalization

FD = Only females dosed

MD = Only males dosed

S.D. = Standard deviation

TABLE 14.

## Individual and Group Mean Maternal Observations at Weaning

Group Number, Test Article, Dosage Level, Dam Number	Total Implantation Sites	No. of Pups Delivered	Remain- ing Site
<u>(1), 0 mg/kg/day (Control):</u>			
30985	16	14	
30986	13	11	
30990	16	15	
30991	16	14	
30992	14	11	
30995	14	13	
30996	15	14	
30997	16	16	
30998	16	16	
31003	15	15	
31004	17	12	
31005	13	13	
31008	14	13	
Mean	15.0	13.6	
<u>+S.D.</u>	<u>1.29</u>	<u>1.66</u>	
<u>(2), BC547-01, 250 mg/kg/day:</u>			
31010	10	10	
31012	16	15	
31013	18	18	
31017	6	6	
31020	15	14	
31023	13	13	
31024	Old not deliver (nongravid)		
31026	16	16	
31027	14	14	
31029	Olded		
31030	13	12	
31032	16	13	
31033	17	15	
Mean	14.0	13.3	
<u>+S.D.</u>	<u>3.46</u>	<u>3.20</u>	
<u>(3), B0547-01, 500 mg/kg/day:</u>			
31034 <sup>b</sup>	Sacrificed		
31035	15	15	
31036	4	4	
31037	16	16	
31038	Old not deliver (nongravid)		
31039	15	13	
31040	15	14	
31042	14	13	
31046	15	15	
31048	16	13	
31050	17	15	
31053	17	17	
31058	13	12	
Mean	14.3	13.4	
<u>+S.D.</u>	<u>3.61</u>	<u>3.44</u>	

<sup>a</sup> Implantation sites not corresponding to delivered pups; values represent postimplantation loss and/or complete cannibalization

<sup>b</sup> Sacrificed in extremis, no evidence of copulation, unable to determine pregnancy status

S.D. - Standard deviation

TABLE 14. Cont.

## Individual and Group Mean Maternal Observations at Weaning

Group Number, Test Article, Dosage Level, Dam Number	Total Implantation Sites	No. of Pups Delivered	Remaining Sites <sup>a</sup>
(4), B0547-01, <u>1000 mg/kg/day:</u>			
31060 <sup>c</sup>	Died		
31061	10	10	0
31067	15	15	2
31068	16	16	0
31069	15	13	2
31070	13	12	1
31072 <sup>d</sup>	1	0	1
31074	Died		
31075	13	12	1
31078	10	10	0
31080	15	15	0
31081	13	13	0
31082	Died		
31083	16	12	4
Mean	12.5	11.5	1.0
<u>+S.D.</u>	4.34	4.20	1.2
(5), B0547-01, <u>250 mg/kg/day:</u>			
31085	14	14	0
31086	11	9	2
31092	16	14	2
31094	14	13	1
31096	14	14	0
31100	14	12	2
31101	7	5	2
31102	17	16	1
31104	19	17	2
31105	16	16	0
31106	18	18	0
31107	Did not deliver (nongravid)		
Mean	14.5	13.5	1.0
<u>+S.D.</u>	3.36	3.75	0.0
(6), B0547-01, <u>500 mg/kg/day:</u>			
31114	15	14	1
31115	17	14	3
31117	12	11	0
31120	15	15	1
31121	15	14	1
31123	15	14	0
31124	16	16	1
31125	18	17	1
31127	16	15	1
31128	16	12	4
31130	16	14	2
31131	17	16	1
31132	13	13	0
Mean	15.5	14.2	1.0
<u>+S.D.</u>	1.61	1.64	1.0

<sup>a</sup>Implantation sites not corresponding to delivered pups; values postimplantation loss and/or complete cannibalization<sup>b</sup>Sacrificed in extremis, no evidence of copulation, unable to determine pregnancy status<sup>c</sup>Died gestation day 3; unable to determine pregnancy status<sup>d</sup>Did not deliver, sacrificed 25 days after separation from male

S.D. - Standard deviation

TABLE 14. Cont.

## Individual and Group Mean Maternal Observations at Weaning

Group Number, Test Article, Dosage Level, Dam Number	Total Implantation Sites	No. of Pups Delivered	Remaining Sites
<u>(7), 80547-01, 1000 mg/kg/day:</u>			
31134	14*	15	-
31141	16	15	1
31143	15	15	0
31144	15	15	0
31146	14	13	0
31147	15	15	0
31148	16	14	2
31149	15	14	1
31150	6	6	0
31153	5	5	0
31154	14	13	1
31155	7	7	0
Mean	12.5	12.3	0.5
+S.D.	4.27	3.86	0.69

\*Implantation sites not corresponding to delivered pups; values represent postimplantation loss and/or complete cannibalization

#Pups delivered exceeds total implantation sites, value excluded from calculation of mean

S.D. - Standard deviation  
- Not applicable

APPENDIX A  
Quality Assurance Inspections

191-900

**Quality Assurance Inspections**

<u>Dates of Inspections</u>	<u>Dates of Reports to Management and to Study Director</u>
3/10/83	5/12/83
3/14/83	5/26/83
3/17/83	8/22/83
3/18/83	8/24/83
5/09/83	11/07/83
5/10/83	11/22/83
5/18/83	
5/19/83	
5/23/83	
5/24/83	
5/25/83	
6/01/83	
6/21/83	
8/19/83	
11/07/83	
11/22/83	

APPENDIX B  
Historical Control Data

191-900

## IRDC Historical Control Data - Charles River COBS® CD® Rats

Page 82

Summary of Maternal and Fetal Observations at Cesarean Section

No. of animals in the historical control:	1758
No. of animals that died:	1
No. of animals that delivered:	6
No. of animals examined at Cesarean section:	1751
No. nongravid:	164
No. gravid:	1587
No. of dams with resorptions only:	8
No. of dams with live fetuses:	1579
No. of live fetuses/dam:	13.3[10.5-15.7]
No. of postimplantation losses/dam:	0.8[0.3-1.6]
No. of implantations/dam:	14.2[11.6-16.3]
No. of corpora lutea/dam:	16.0[13.7-19.7]
Fetal sex ratio: Male:Female	10756:10430
Mean fetal body weight (g):	3.6[3.4-4.2]

[ ] - Range of means

IMDC IMPAECUTIVE HISTORICAL CONTROL DATA  
Charles River Curve C10 Rate

Rate, (When Applicable)  
Reproductive/Litter Parameters

		Number	Value	Range
<u>MALE</u>				(80.0% - 100.0%)
<u>Fertility Index</u>	<u>Partile Males</u> <u>Total Males Mated</u>	407 411	94.1%	
<u>FEMALE</u>	<u>No. of Females Pregnant</u> <u>No. of Females Mated</u>	926 1027	90.2%	(62.1% - 100.0%)
<u>Gestation Length (Days)</u>	<u>Total No. of Days</u> <u>No. of Pregnant Dams</u>	16325 7455	21.9	(21.6 - 22.4)
<u>No. Implantation Sites at Weanling/Dam</u>	<u>Total No. of Implantation Sites</u> <u>No. of Pregnant Dams</u>	1064 73	14.6	(14.0 - 14.9)
<u>Puer Implantation Loss/Dam</u>	<u>No. of Implantation Sites at Weanling</u> <u>Total No. Pups at Birth</u> <u>No. of Implantation Sites</u>	1064-989 1064 1064	7.0%	(3.3% - 8.3%)
<u>LITTER SIZE</u>				
<u>Viable Pups/Litter at Day 0</u>	<u>Total No. of Viable Pups</u> <u>No. of Pregnant Dams</u>	10632 860	12.4	(10.4 - 15.0)
<u>Stillborn Pups/Litter</u>	<u>Total No. of Stillborn Pups</u> <u>No. of Pregnant Dams</u>	208 860	0.2	(0.0 - 1.4)
<u>PUP SEX DISTRIBUTION AT WEANING:</u>	<u>Total No. of Males:</u> <u>Total No. of Females:</u>	Total No. of Males: Total No. of Females	<u>Male:Female</u> <u>(431:466 - 49:51)</u>	<u>Male:Female</u> <u>(40.7:59.3 - 35:64.7)</u>
<u>PUP SURVIVAL AT BIRTH</u>	<u>Total No. of Viable Pups at Birth</u> <u>Total No. of Pups Born</u>	10594 10731	96.2%	(89.3% - 100.0%)
<u>Gestation Survival Index</u>				
<u>PUP SURVIVAL INDICES THROUGH</u>				
<u>WEANING</u>				
<u>Lactation Day 4 (before Reduction)</u>	<u>Total No. of Viable Pups on Day 4 (N.R.)</u> <u>Total No. of Viable Pups on Day 0</u>	5909 6013	98.1%	(95.7% - 100.0%)
<u>Lactation Day 4 (No Reduction of Litter Size)</u>	<u>Total No. of Viable Pups on Day 4</u> <u>Total No. of Viable Pups on Day 0</u>	2198 2158	98.4%	(95.3% - 100.0%)
<u>Lactation Day 12</u>	<u>Total No. of Viable Pups on Day 12</u> <u>Total No. of Viable Pups on Day 4 (N.R.)</u>	2768 2784	99.4%	(98.4% - 100.0%)

INDU REPRODUCTIVE HISTORICAL CONTROL DATA  
Charles River CONSC CD® Mice

<u>Box, (When Applicable)</u> <u>Reproductive/Litter Parameter</u>	<u>Number</u>	<u>Value</u>	<u>Range</u>
Lactation Day 14	Total No. of Viable Pups on Day 14 Total No. of Viable Pups on Day 4 (A.R.) 5 (A.R. or 7)	4998 4973	99.51 (97.01 - 100.01)
Lactation Day 21	Total No. of Viable Pups on Day 21 Total No. of Viable Pups on Day 12 or 14	8310 1347	99.61 (97.11 - 100.01)
<u>PUP BODY WEIGHT (g) AT BIRTH</u>			
Male	Total Viable Male Pup Weight at Birth Total No. of Viable Male Pups	1272.0 135	6.6 g (6.4 g - 7.1 g)
Female	Total Viable Female Pup Weight at Birth Total No. of Viable Female Pups	1197.9 132	6.2 g (6.1 g - 6.8 g)
Litter Weight (Males and Females)	Total Mean Viable Litter Weight at Birth Total No. of Litters	2669.8 415	6.4 g (5.6 g - 7.4 g)
<u>PUP BODY WEIGHT (g) THROUGH</u>			
<u>WEANING</u>			
Lactation Day 4 (Before Reduction)	Total Mean Viable Litter Weight on Day 4 (A.R.)	4934.6	(9.2 g - 11.3 g)
Litter Weight (Males and Females)	Total No. of Litters on Day 4 (A.R.)	485	
Lactation Day 4 (After Reduction)			
Litter Weight (Males and Females)	Total Mean Viable Litter Weight on Day 4 (A.R.)	3557.7	(9.2 g - 11.2 g)
Lactation Day 4 (No Reduction of (Litter Size))	Total No. of Litters on Day 4 (A.R.)	350	
Male	Total Viable Male Pup Weight on Day 4 Total No. of Viable Male Pups on Day 4	2092 196	10.7 g (9.2 g - 11.8 g)
Female	Total Viable Female Pup Weight on Day 4 Total No. of Viable Female Pups on Day 4	1935.6 196	10.1 g (9.7 g - 11.5 g)
Litter Weight (Males and Females)	Total Mean Viable Litter Weight on Day 4 Total No. of Litters on Day 4	644.6 61	10.6 g (9.7 g - 11.5 g)
Lactation Day 7			
Male	Total Viable Male Pup Weight on Day 7 Total No. of Viable Male Pups on Day 7	238.9 47	15.7 g (15.6 g - 15.8 g)
Female	Total Viable Female Pup Weight on Day 7 Total No. of Viable Female Pups on Day 7	204.6 47	15.0 g (15.0 g - 15.0 g)
Litter Weight (Males and Females)	Total Mean Viable Litter Weight on Day 7 Total No. of Litters on Day 7	1640.1 124	14.8 g (14.2 g - 15.9 g)
Lactation Day 12			
Male	Total Viable Male Pup Weight on Day 12 Total No. of Viable Male Pups on Day 12	2114.6 151	24.6 g (22.3 g - 26.2 g)
Female	Total Viable Female Pup Weight on Day 12 Total No. of Viable Female Pups on Day 12	1553 151	23.5 g (22.1 g - 27.3 g)
Litter Weight (Males and Females)	Total Mean Viable Litter Weight on Day 12 Total No. of Litters on Day 12	1459.0 61	23.9 g (22.0 g - 25.6 g)

INDC REPRODUCTIVE HISTORICAL CONTROL DATA  
Charles River Coage CDE Rate

Sex, (When Applicable) Reproductive/Litter Parameter		Number	Value	Range
<b>Lactation Day 14</b>				
Hale	Total Viable Male Pup Weight on Day 14 Total No. Viable Male Pups on Day 14	<u>1010.4</u> <u>47</u>	22.7 g	(22.4 g - 28.0 g)
Female	Total Viable Female Pup Weight on Day 14 Total No. Viable Female Pups on Day 14	<u>126.5</u> <u>47</u>	26.9 g	(26.7 g - 27.1 g)
Litter	Total Mean Viable Litter Weight on Day 14 Total No. Litters on Day 14	<u>1011.2</u> <u>35</u>	29.1 g	(26.9 g - 34.3 g)
<b>Lactation Day 21</b>				
Hale	Total Viable Male Pup Weight on Day 21 Total No. Viable Male Pups on Day 21	<u>387.8</u> <u>46</u>	45.7 g	(39.1 g - 54.7 g)
Female	Total Viable Female Pup Weight on Day 21 Total No. Viable Female Pups on Day 21	<u>310.1</u> <u>43</u>	44.1 g	(37.5 g - 52.6 g)

The historical control data compiled includes study data from the interval of April 17, 1977 to September 29, 1980 (20 studies)

APPENDIX C  
Personnel Involved in the Study

191-900

The following list of people were responsible for the supervision of various phases of this study:



Unit Supervisor, Test Material Control  
Group Supervisor, Reproduction and Teratology  
Unit Supervisor, Reproduction and Teratology  
Group Supervisor, Test Material Control  
Report Writer, Reproduction and Teratology  
Assistant Director, Toxicology Division and Director of Reproduction and Teratology, Study Director  
Unit Supervisor, Reproduction and Teratology  
Assistant to the Director, Reproduction and Teratology  
Director of Laboratory Services



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

William C. Kuryla, Ph.D.  
Associate Director, Product Safety  
Union Carbide Corporation  
39 Old Ridgebury Road  
Danbury, Connecticut 06817-0001

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

MAR 30 1995

EPA acknowledges the receipt of information submitted by your organization under Section 8(e) of the Toxic Substances Control Act (TSCA). For your reference, copies of the first page(s) of your submission(s) are enclosed and display the TSCA §8(e) Document Control Number (e.g., 8EHQ-00-0000) assigned by EPA to your submission(s). Please cite the assigned 8(e) number when submitting follow-up or supplemental information and refer to the reverse side of this page for "EPA Information Requests".

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Please address any further correspondence with the Agency related to this TSCA 8(e) submission to:

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Attn: TSCA Section 8(e) Coordinator  
Office of Pollution Prevention and Toxics  
U.S. Environmental Protection Agency  
Washington, D.C. 20460-0001

EPA looks forward to continued cooperation with your organization in its ongoing efforts to evaluate and manage potential risks posed by chemicals to health and the environment.

Sincerely,

*Terry R. O'Bryan*  
Terry R. O'Bryan  
Risk Analysis Branch

Enclosure

12459A



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## Triage of 8(e) Submissions

Date sent to triage: \_\_\_\_\_

NON-CAP

CAP

Submission number: 12459A

TSCA Inventory:  Y  N  D

---

Study type (circle appropriate):

Group 1 - Dick Clements (1 copy total)

ECO                  AQUATO

Group 2 - Ernie Falke (1 copy total)

ATOX                  SBTOX                  SEN                  w/NEUR

Group 3 - Elizabeth Margosches (1 copy each)

STOX                  CTOX                  EPI                   RTOX                  GTOX  
STOX/ONCO    CTOX/ONCO    IMMUNO                  CYTO                  NEUR

Other (FATE, EXPO, MET, etc.): \_\_\_\_\_

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Notes:

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pages 1,2, tabs

Notes:

Contractor reviewer: LPS Date: 2/16/95

## CECATS/STRIAGE TRACKING DBASE ENTRY FORM

CECATS DATA:  
Submission # 8EHO-0992 - 12459 SEQ. A

## INFORMATION REQUESTED: FLWP DATE

- 0501 NO INFO REQUESTED  
 0502 INFO REQUESTED (TECH)  
 0503 INFO REQUESTED (VOL ACTIONS)  
 0504 INFO REQUESTED (REPORTING RATIONALE)  
**DISPOSITION:**  
 063 REFER TO CHEMICAL SCREENING  
 067B CAP NOTICE

## VOLUNTARY ACTIONS:

- 041 NO ACTION REPORTED  
 0402 STUDIES PLANNED/UNDERWAY  
 0403 NOTIFICATION OF WORKERS/OTHERS  
 0404 LAB/MSDS CHANGES  
 0405 PROCESS/HANDLING CHANGES  
 0406 APP/USE DISCONTINUED  
 0407 PRODUCTION DISCONTINUED  
 0408 CONFIDENTIAL

TYPE INT. SUPP. FLWP

SUBMITTER NAME: Union Carbide  
Corporation

SUB. DATE: 09/22/92

OTS DATE: 09/29/92

CSRAD DATE: 01/31/95

CAS#

112-34-5

CHEMICAL NAME:

## INFORMATION TYPE:

P F C

## INFORMATION TYPE:

P F C

## INFORMATION TYPE:

P F C

0201	ONCO (HUMAN)	01 02 04
0202	ONCO (ANIMAL)	01 02 04
0203	CELL TRANS (IN VITRO)	01 02 04
0204	MUTA (IN VITRO)	01 02 04
0205	MUTA (IN VIVO)	01 02 04
0206	REPRO/TERATO (HUMAN)	01 02 04
0207	REPRO/TERATO (ANIMAL)	01 02 04
0208	NEURO (HUMAN)	01 02 04
0209	NEURO (ANIMAL)	01 02 04
0210	ACUTE TOX. (HUMAN)	01 02 04
0211	CHR. TOX. (HUMAN)	01 02 04
0212	ACUTE TOX. (ANIMAL)	01 02 04
0213	SUB ACUTE TOX (ANIMAL)	01 02 04
0214	SUB CHRONIC TOX (ANIMAL)	01 02 04
0215	CHRONIC TOX (ANIMAL)	01 02 04

0216	EPICLIN
0217	HUMAN EXPOS (PROD CONTAM)
0218	HUMAN EXPOS (ACCIDENTAL)
0219	HUMAN EXPOS (MONITORING)
0220	ECO/AQUA. TOX
0221	ENV. OCCC/REL/FATE
0222	EMER INCI OF ENV CONTAM
0223	RESPONSE REQUEST DELAY
0224	PROD/COMP/CHEM ID
0225	REPORTING RATIONALE
0226	CONFIDENTIAL
0227	ALLERG (HUMAN)
0228	ALLERG (ANIMAL)
0239	METAB/PHARMACO (ANIMAL)
0240	METAB/PHARMACO (HUMAN)

P F C

## INFORMATION TYPE:

P F C

01 02 04	0241 IMMUNO (ANIMAL)
01 02 04	0242 IMMUNO (HUMAN)
01 02 04	0243 CHEM/PHYS PROP
01 02 04	0244 CLASTO (IN VITRO)
01 02 04	0245 CLASTO (ANIMAL)
01 02 04	0246 CLASTO (HUMAN)
01 02 04	0247 DNA DAM/REPAIR
01 02 04	0248 PROD/USE/PROC
01 02 04	0251 MSDS
01 02 04	0299 OTHER

TRIAGE DATA: NON-CBI INVENTORY

ONGOING REVIEW

SPECIES

TOXICOLOGICAL CONCERN:

USE:

PRODUCTION:

YES

YES (DROP/REFER)

RAT

LOW

NO (CONTINUE)

MED

REF/R

HIGH

CAS SR

NO

IN 1 MIN

YES

NO

NO